AN ISO 9001 & 14001 COMPANY

TENDER DOCUMENT

TENDER No: DLI/CON/685/449

FOR

Construction of balance work of Utility Building, Canine School, Equestrian School, Hospital, Laundry, T5 Motor Training School, Watch Tower 3 & 4, Senior Officer Mess, Guest House for faculty (27), Constable Trainee Barrack and Junior Officer Mess 153 (7C) at Bihar Police Academy, Rajgir, District Nalanda, Bihar (Pkg. -5)-Civil, Electrical, and plumbing works

VOLUME – II

Additional Conditions of Contract
&
Drawings
1. **General**

The Additional Conditions shall be read in conjunction with General Conditions of Contract. Where the provisions of these Additional Conditions are at variance with the provision of the General Conditions of Contract, the provisions of these Additional Conditions shall take precedence.

2. **Scope of Work**

The scope of work of the contract shall be “civil, electrical, plumbing and other miscellaneous works at various Buildings inside the campus of Bihar Police Academy Project, Rajgir” (hereinafter referred to as “Works”) as per Technical specifications, Drawings, BOQ, Instructions and Terms and conditions given in Tender Documents.

3. **Commencement and Completion of Project:**

The Contractual Completion Period shall be 8 (eight) months from the date of issue of Telegram /Letter/Fax of Intent of Acceptance of Tender.

4. **Bidders Confirmation**

Bidder confirms that they have read and understood and have copies of the ‘Tender Documents’ and have visited the site and their offer is based on the ‘tender Documents’ and caters to all the works, requirements, etc. thereof.

5. **References :**

Applicable B.S building codes including all amendments upto tender closing date. In case of conflict, the more stringent requirement will apply unless ruled otherwise by EPI/EPI’s client.

6. **Taxes and Duties**

All Taxes, Duties, Statutory levies such as VAT or any other similar Tax in the State concerned, Cess, Octroi, Entry Tax, Turn over Tax, Consignment Tax, Work Contract Tax, Service Tax, Toll Tax, Royalties, Levies and other Tax(es) or Duty(ies) etc as imposed by State / Central / Local Government Bodies from time to time except labour cess for the Works, are included in the contract price. Labour cess shall be borne by EPI and to be paid to the statutory authority on total contract value between EPI and its Client. Income Tax and other Deductions of Taxes as applicable shall be effected from RA Bills / due payment of the contractor.
Measurement of Work Done

Engineer-in-charge shall, except as otherwise provided, ascertain and determine measurement and the value in accordance with the contract work done.

All measurement of all items having financial value shall be entered in Measurement Book and/or level field book so that a complete record is obtained of all works performed under the contract.

All measurements and levels shall be taken jointly by EPI and by the contractor or his authorized representative at least once in a month during the progress of the work and such measurements shall be signed and dated by EPI and the contractors a token of their acceptance. If the contractor objects to any of the measurements recorded, a note shall be made to that effect with reason and signed by both the parties.

If for any reason the contractor or his authorized representative is not available and the work of recording measurement is suspended by EPI, EPI shall not entertain any claim from contractor for any loss or damages on this account. If the contractor or his authorized representative does not remain present at the time of such measurements after the contractor has been given a notice in writing three (3) days in advance or fails to countersign or to record objection within a week from the date of the measurement then such measurements recorded in his absence by EPI shall be deemed to be accepted by the Contractor.

The contractor shall, without extra charge, provide all assistance with every appliance labour and other things necessary for measurements and recording levels.

All work to be measured as per latest BS standards with up to date corrections.

The contractor shall give not less than seven days’ notice to EPI before covering up or otherwise placing beyond the reach of measurement any work In order that the same may be measured and correct dimension thereof be taken before the same is covered up or place beyond the reach of measurement and shall not cover up and placed beyond reach of measurement any work without consent in writing from EPI / EPI’s client who shall within the aforesaid period of 7 days inspect the work, and if any work shall be covered up or placed beyond the reach of measurements without such notice having been given or consent being obtained in writing the same shall be uncovered at the contractor’s expense or in default thereof no payment or allowance shall be made for such work or the materials with which the same was executed.

EPI/EPI’s client may cause to check the measurement recorded jointly or otherwise as aforesaid and all provisions stipulated herein above shall be applicable to such checking of measurement or levels.
It is also a term of this contract that recording of measurements of any item of work in the measurement book and/or its payment in the interim, on account or final bill shall not be considered as conclusive evidence as to the sufficiency of any work or material to which it relates nor shall it relieve the contractor from liabilities from any over measurement / defects noticed till completion of the defects liability period.

8 Insurance

CAR Policy for whole value of contract shall be taken by EPI. However, the CONTRACTOR shall take insurance cover at its own cost towards Workman Compensation Act for its own workers, employees and for the plant & Equipment deployed by the CONTRACTOR at the project site and shall furnish documentary proof of the same to EPI failing which no payments shall be released to the CONTRACTOR against work done. THE CONTRACTOR shall assist EPI in follow up with insurance company in case of any claim related to CONTRACTOR’s scope of work. EPI is not liable to pay any claim of the CONTRACTOR if it is not paid by insurance company due to any reasons whatsoever.

9 Contractor’s Plant and Equipment

The CONTRACTOR shall deploy sufficient plant & equipment of the required capacity and in good working condition for completion of the works in stipulated time with required quality, the equipment should either be owned by the CONTRACTOR or hired/leased. The contractor shall deploy Concrete Batching Plant of Minimum capacity 15m3/hour, Transit mixer, concrete pump etc. The deployment of equipment by the CONTRACTOR shall be as decided by EPI/EPI’s Client, for execution of works and as per schedule agreed with EPI. The CONTRACTOR shall make arrangement for regular maintenance including preventive and breakdown maintenance and maintain stock of essential spares at site/near to site so as to ensure minimum breakdown time of equipment. The equipment once brought to site shall not be allowed to be removed without written permission of EPI. In case the CONTRACTOR fails to deploy sufficient equipment to the satisfaction of EPI or in case of prolonged breakdown of equipment, EPI at its sole discretion shall arrange the required equipment and debit all the related costs including ten percent overheads of EPI and shall recover the same from the due payments of the CONTRACTOR, including through encashment of its bank guarantees available with EPI.

10 Discrepancies and adjustment of errors

The Several documents forming the contract are to be taken as mutually explanatory to one another, detailed drawings being followed in preference to small scale drawings and figured dimensions in preference to scale and Additional Conditions in preference to General Conditions.
11 **Order of Precedence**

In case of ambiguity in schedule of rates, General Conditions, Specifications, Drawings, the following order of precedence will prevail.

i) Agreed variation  
ii) Bill of Quantities  
iii) Additional Conditions / Corrigendum  
iv) Drawings  
v) Specifications  
vi) General Conditions of Contract

12 **Conflict in Documents**

If there are varying or conflicting provisions made in anyone document forming part of the contract, the Engineer-in-charge of EPI shall be the deciding authority with regard to the intention of the document and his decision shall be final and binding on the contractor.

13 **Documents**

Documents required to be maintained at site, one copy of following:

1. Contract Document  
2. All Drawings  
3. Specifications  
4. Corrigendum  
5. Reviewed shop drawings  
6. Site order book  
7. Other modifications to contract  
8. Field test reports  
9. Copy of approved work schedule and its updated revisions as approved.

14 **Performance Guarantee**

(I) The contractor shall submit an irrevocable PERFORMANCE GUARANTEE of 2% (Two percent) of the tendered amount including earnest money in the shape of Bank Guarantee within the period specified in scheduled 'C' from the date of Issue of letter of acceptance.

(II) The performance Guarantee shall be initially valid up to 28 days beyond the defect liability period.

(III) EPI shall not make a claim under the Performance guarantee except for amounts to which they are entitled under the contract. (notwithstanding and/or without prejudice in the Work Order) in the event of

a) Failure by the contractor to extend the validity of the performance guarantee as described herein above in which event EPI may claim the full amount of the performance guarantee.

b) Failure by the contractor to pay EPI any amount due either as agreed by the
contractor or determined any of the clauses of the condition of the work order within 30 days of the service of the notice to this affect by EPI.

c) Failure by the contractor to rectify any defects as defined in the defect liability clause to the satisfaction of EPI.

(IV) In the event of the contract being determined or rescinded under provisions of any clause/condition of the agreement the performance guarantee shall stand forfeited in full and shall be absolutely at the disposal of EPI.

15 **Security Deposit**

The person/persons whose tender(s) may be accepted (hereinafter called the contractor) shall permit EPI at the time of making any payment to him for work done under the contract to deduct a sum at 10% (Ten percent) from the gross amount of each running bill. If value of work exceeds the agreement value, security deposit (10%) will be recovered for the exceeded work also.

All compensations or the other sums of money payable by the contractor under the terms of this contract may be deducted from, or paid by the sale of a sufficient part of his security deposit or from any sums which may be due to or may become due to the contractor by EPI on any account whatsoever and in the event of his Security Deposit being reduced by reason of any such deductions or sale as aforesaid, the contractor shall within 10 days make good in cash or fixed deposit receipt tendered by the State Bank of India or by Scheduled Banks or Government Securities (if deposited for more than 12 months) endorsed in favour of EPI, any sum or Sums which may have been deducted from, or raised by sale of his Security Deposit or any part thereof. The security deposit shall be collected from the running bills of the contractor at the rates mentioned above and the earnest money at the time of tenders will be treated a part of the Security Deposit.

16 **Registration**

The CONTRACTOR confirms that it holds EPF Code number, CST-TIN, VAT – TIN/ Sales tax on Works contract number, Service tax registration number, PAN (Permanent Account Number of Income Tax) etc. and shall be responsible for depositing EPF subscription and contribution for labour and staff employed by it on the works and Service tax, other taxes, duties and dues etc. as per statutory requirements and documentary evidence of same shall be provided to EPI. The CONTRACTOR shall also be responsible for labour welfare and for arranging labour and other licenses/permits/clearance etc. for the project at their own cost. In case EPI has to take labour license or and other licenses, all expenditure towards the same shall also be recovered from the CONTRACTOR. The CONTRACTOR shall comply with all the requirements as per labour laws/acts. All the records in this regard shall be maintained by the CONTRACTOR as per statutory requirements and rules and shall be produced by the CONTRACTOR on demand if required.
Manpower

The CONTRACTOR shall post adequate competent engineers and supervisory staff at site (minimum numbers mentioned in Schedule-F of contract data) for day-to-day execution and supervision of its works etc. during the entire duration of the contract including maintenance/defect liability period. The minimum number and level of engineers, supervisors and other personnel to be deployed by the CONTRACTOR should be as directed by EPI/EPI’s Client. In case the CONTRACTOR fails to deploy adequate number of personnel at site/office, EPI after giving seven days notice shall engage the required personnel solely at the risk and cost of the CONTRACTOR and recover the cost of the same from the RA bills account of CONTRACTOR. EPI shall exercise overall management, monitoring and coordination of project. EPI shall not post any staff during maintenance/defect liability period for which the CONTRACTOR shall make suitable arrangement to the satisfaction of EPI / EPI’s Client.

No dealing directly with EPI’s Client

The CONTRACTOR will not deal directly with Client and all the correspondence in matters regarding bills, claims, interpretation of the specifications, conditions and all matters related to the contract with Client, Client’s Consultants, all other agencies including Government and Statutory bodies etc. shall be done through EPI only. The CONTRACTOR shall prepare and submit expeditiously all bills, claims, details, clarifications, documents, information, etc. as required by EPI/EPI’s Client for proper execution and successful completion of the works.

Association with EPI

If desired by EPI, the CONTRACTOR shall be available / associate with EPI in meetings with Client for its portion of work at their own cost. The CONTRACTOR shall furnish all information and clarifications as and when required by EPI/EPI’s Client.

Non interference with other works

The CONTRACTOR shall plan and execute the works in his scope of work in such a manner that the other works, connected with the works of the CONTRACTOR, but not included in the CONTRACTOR’s scope of work, do not get affected/delayed.

Compliance to statutory rules

The CONTRACTOR shall ensure compliance with all Central, State and Local Laws, Rules, Regulations etc. as applicable or may be applicable during the course of execution, maintenance etc. of the works and shall indemnify EPI against any claim or damages whatsoever on such accounts. The CONTRACTOR shall also keep EPI indemnified at all times against infringement of any Patent or Intellectual Property rights.
ISO
EPI is an ISO:9001, ISO:14001 and ISO:18001 Company. The conditions of the ISO as applicable should be followed by the CONTRACTOR for implementation & maintaining the established procedures of EPI for this purpose. Following documents have been provided by EPI to the CONTRACTOR & the CONTRACTOR confirms receipt of the same:-

a. Quality & Environmental Policy
b. Objectives & Targets.
c. Operational control procedures – Noise.
d. Operational Control Procedures – Wastage

Payment
The interim or running account bill shall be submitted by the contractor for the work executed on the basis of such recorded measurements on the format of EPI/EPI’s client in qua-duplicate on or before the date of every month fixed for the same by EPI / EPI’s client. The contractor shall not be entitled to be paid any such interim payment if the gross work done together with net payment adjustment of advances for material collected if any since the last such payment is less that the amount specified in Schedule – ‘D’, in which case the interim bill shall be prepared on the appointed date of the month after the requisite progress is achieved. EPI / EPI’s client shall arrange to have the bill verified by taking or causing to be taken where necessary the requisite measurement of the work. In the event of the failure of the contractor to submit the bills, EPI shall prepare or caused to be prepared such bills in which events no claim whatsoever due to delays in payment including that of interest shall be payable to the contractor. Payment on account of amount admissible shall be made by EPI certifying the sum to which the contractor is considered entitled by way of interim payment at such rates as decided by EPI. The amount admissible shall be paid by 30th working day of presentation of the bill by the contractor to EPI together with the account of dismantled the materials if any.

Any such interim payments shall be regarded as payment by way of advances against final payment only and shall not preclude the requiring of bad, unsound and imperfect or unskilled work to be rejected, removed, taken away and reconstructed or re-erected. Any certificate given by EPI/EPI’s client relating to the work done or materials delivered forming part of such payment may be modified or corrected by any subsequent such certificates or by the final certificate and shall not by itself be conclusive evidence that any work or materials to which it relates is/are in accordance with contract and specifications. Any such interim payment, or any part thereof shall not in any respect conclude determine or affect in any way powers of EPI under the contract or any of such payments be treated as final settlement and adjustment of accounts or in any way vary or affect the contract.

Pending consideration of extension of date of completion interim payments shall continue to be made as herein provided as per Clause 24 without prejudice to the right of EPI to action under the terms of this contract or delay in the completion of work, if the extension of date of completion is not granted by EPI. The Contractor shall have no claim in case the payments are delayed due to any reason whatsoever.
Compensation for delay
If the contractor fails to maintain the required progress as mentioned in contract data or to complete the work and clear the site on or before the contractual or extended date of completion, he shall, without prejudice to any other right or remedy available under the law to EPI, on account of such breach, pay as agreed compensation the amount calculated at the rates stipulated below or as EPI may decide (whose decision in writing shall be final and binding) on the amount of tendered value of the work for every completed day/month (as applicable) that the progress remains below that specified in contract data or that the work remains incomplete.

i) Compensation for delay of work – at the rate of 2% per month of delay to be computed on per day basis.

Provided always that the total amount of compensation for delay to be paid under this condition shall not exceed 10% of the contract amount. The amount of compensation may be adjusted or set off against any sum payable to the contractor under this or any other contract with EPI. In case the contractor does not achieve a particular milestone mentioned in Schedule ‘D’ of contract data or the rescheduled milestone the amount shown against that milestone shall be withheld, to be adjusted against the compensation levied and the final grant of extension of time. Withholding of this amount on failure to achieve a milestone shall be automatic without the notice to the contractor. However if the contractor catches up with the progress of work on the subsequent milestone the withheld amount shall be released. In case the contractor fails to make-up for the delay in subsequent milestone amount mentioned against each milestone missed subsequently also shall be withheld. However, no interest whatsoever shall be payable on such withheld amount.

Special compensation for delay
In case the project execution is delayed beyond the contractual scheduled completion period due to any reason attributable to the CONTRACTOR, the staff and site office expenses of EPI for extended period shall be paid by the CONTRACTOR to EPI at the rate of Rs.1.00 lac per month. This shall be in addition to the facilities provided by the CONTRACTOR to EPI and the Liquidated Damages/ Compensation for delay/Penalties etc. if any, leviable by EPI.

Work subject to audit
The work executed by the CONTRACTOR shall be subject to audit and quality control checks from Quality Control Division & Technical audit of EPI/EPI’s Client, inspecting Agency of the Client and Chief Technical Examiner of Central Vigilance Commission, Govt. of India. In the eventuality of any defect/sub standard works as brought out in the report or noticed otherwise at any time during execution, maintenance period etc., the same shall be made good by the CONTRACTOR without any cost to EPI. In case the CONTRACTOR fails to rectify the defect/sub- standard work within the time period stipulated by EPI, rectification of the same shall be got done by EPI at the risk and cost of the CONTRACTOR and shall recover the amount from the dues of the CONTRACTOR.
27 **False statement**

In case, at a later stage, it is found that the CONTRACTOR has submitted incorrect, false details and credentials resulting in apprehensions on the capabilities of CONTRACTOR with regard to quality & timely completion of works, financial capabilities etc. EPI can terminate this agreement solely at its option. In this eventuality the CONTRACTOR shall be liable for the losses suffered by EPI and further CONTRACTOR shall have no claim on EPI, whatsoever.

28 **Statutory Approvals**

The contractor is responsible for obtaining all statutory approvals during construction and thereafter. Necessary liaisoning to be undertaken wherever required with no extra claim. All the approvals shall be taken before the scheduled completion period and in any case before the work can be taken over.

29 **Price Escalation**

Price escalation will not be applicable.

30 **Payment due to increase / decrease in prices / wages after receipt of tender**

This shall not be applicable.

31 **Additional / Extra Items**

The following procedures shall be meticulously adopted in case of any additional / extra items.

i) EPI shall issue a Contemplated Change Notice (CCN) in the format enclosed as Annexure.

ii) Based upon the requirement stipulated in CCN contractor shall submit analysis to reflect financial implications if any, within 7 days from issue of CCN. The price analysis shall be based upon rates given in bill of items for the similar works or can be derived on the basis of basic rate of material and labour appended with annexure, in case the item is not available in bill of items.

iii) After review and approval of analysis by Engineer In-charge of EPI / EPI's Client, change order shall be issued by EPI in the format enclosed with the annexure to enable contractor to execute item. For the purpose of cost analysis the following procedures applies :

   a) O.H and profit of Main civil Contractors work shall not exceed 15% including liability of all types of taxes.
b) For Works of other trades:
5% shall be accounted over and above the quotation submitted by subcontractor for co-ordination charges of main civil contractor.

iv) For substitute items contractor shall produce price analysis for the approval of EPI / EPI’s client and adjustment in the contract amount accordingly. No overheads and profits shall be applicable against substituted items.

32 Variation

The variation limit shall be ± 50% of the value of Contract for works within the site and of similar nature and specification at the same accepted rate. There is no limit of variations for individual Items.

33 Codes

1. Applicable British Standard (B.S)/ Indian Standards (IS) and in the absence of definite provision on particular issue in the specification / codes, reference may be made to relevant latest Codes recommended to be used and good engineering practices and / or as per instruction / suggestion of EPI / EPI’s Client.

2. Wherever applicable / instructed by EPI / EPI’s client, strict compliance to ‘GRIHA’ manual is mandatory for the contractor for execution of work.

34 Safety Measures

It shall be the sole responsibility of the Contractor to ensure all safety measures giving proper, prior notices etc. and obtaining prior permission from concerned local authorities as per bye-laws or directions issued by them at his own cost. No claim of the contractor in this regard shall be entertained. Proforma of Safety Measures (to be provided by EPI) shall be attached along with each bill duly filled by the contractor and certified by EPI.

35 Design Mix

The CONTRACTOR is required to submit his design mix for various grades of concrete for approval of EPI/EPI’s client keeping in view the requirement stipulated in the technical specification and relevant codes.
Materials to be provided by the contractor

The contractor shall at his own expense, provide all materials, required for the works.

The contractor shall at his own expense and without delay supply to EPI samples of materials to be used on the work and shall get approved in advance. All such materials to be provided by the Contractor shall be in conformity with the specification laid down or referred to in the contract. The contractor shall if requested by EPI furnish proof to the satisfaction of EPI that the materials so comply. EPI shall within 15 days of supply of samples or within such further period as he may require intimate to the contractor in writing whether samples are approved by them or not. If samples are not approved the contractor shall forthwith arrange to supply to EPI for his approval fresh samples complying with the specifications laid down in the contract. When materials are required to be tested in accordance with specifications approval of EPI/EPI’s Client shall be issued after the test results are received.

The contractor shall, at his risk and cost, submit the samples the materials to be tested or analysis shall not make use of or incorporate in the work any materials represented by the samples until the required tests or analysis have been made and materials finally accepted by EPI. The contractor shall not be eligible for any claim or compensation either arising any delay in the work or due to any corrective measures required to be taken on account of and as a result of testing of materials.

The contractor shall at his risk and cost make all arrangements and shall provide all facilities as EPI may require for collecting and preparing the required nos. of samples for such tests at such time and to such place or places as may be directed by EPI and bear all charges and cost of testing. EPI / EPI’s client shall at all time have access to the works and to all workshops and places where work is being prepared or from where materials, manufactured articles or machinery are being obtained for the works and the contractor shall afford every facility and every assistance in obtaining the right to such access.

EPI shall have full powers to require the removal from the premises of all material's which in their opinion are not in accordance with the specifications and in case of default EPI shall be at liberty to employ at the expense of the contractor, other persons to remove the same without being answerable or accountable for any loss or damage that may happen or arise to such materials. EPI shall also have full powers to require other proper materials to be substituted thereof and in case of default EPI may cause the same to be supplied and all costs which may attain such removal and substitution shall be borne by the contractor.
EPI shall supply reinforcement steel on recoverable basis as per actual cost. For RCC item, party shall quote for labour rate also in the space provided in the BOQ.

Mobilization Advance and Plant Equipment Advance

No mobilization advance or plant equipment advance will be paid.
Sub-standard Material

Any material/item/fitting/fixtures rejected by EPI / EPI’s client shall be removed from the site within 48 hours of issue of instructions to this effect by EPI. Failing this, EPI shall have the rights to get these removed and the Contractor shall have no claim whatsoever in this regard.

Schedule of Rates

Schedule of rates has been enclosed. Final approved rates against each item of work shall be used in case of any extra / additional work ordered to be executed. Schedule of rates shall be applicable throughout currency of contract.

For RCC work, item number 5.42(A) a1,b1,c1, party shall separately quote for labour rate against item number 5.42(B) a2, b2, c2. In case of labour rate, EPI will arrange to supply concrete through batching plant and transit mixer to the nearest possible point of concreting. Concrete pump shall be supplied for slab concreting only. In case of labour rate, local conveyance from the point of dumping by transit mixer/concrete pump to the actual place of concreting, pouring, spreading, compacting, curing etc would be included in the scope of the party.

For Steel reinforcement, item no 5.29.7A, 5.29.7B, 5.29TE, EPI shall supply steel on recoverable basis as per actual cost.

Alterations, Additions and Omissions

EPI/EPI’s client can make any variation of the form, quality or quantity of the works or any part thereof that may, in their opinion be necessary and for that purpose, or if for any other reason it shall in his opinion be desirable, they shall have power to order in writing to the contractor to do and the contractor shall do any of the following:

i) Increase or decrease in the quantity of any work included in the contract in which case the value of contract may be increased or decreased.

ii) Omit any such work.

iii) Change the levels, lines, position and dimension of any part of the works and

iv) Execute additional work of any kind necessary for the completion of the works and no such variation shall in any way vitiate or invalidate the contract, but the value, if any of all such variations shall be taken into account to ascertain the amount of the Contract Price.

v) The contractor shall not effect any of the aforementioned changes without the written order of EPI / EPI’s client.
Dismantled Material

The contractor shall treat all materials obtained during dismantled of structure, excavation of the site for a work etc as the property of EPI/EPI's client and such materials shall be disposed off to the best advantage of EPI/EPI's client according to the Codal provision.

TIME ESSENCE OF CONTRACT & EXTENSION FOR DELAY

The time allowed for execution of the works as specified in the terms of contract or the extended time in accordance with these conditions shall be the essence of the contract. The execution of the works shall commence from the 10th Day or such time period as mentioned in letter of Intent after the date on which the Engineer-In-Charge issues written orders to commence the work. If the Contractor commits default in commencing the execution of the work as aforesaid, the Executing Agency shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the security deposit money absolutely.

Within 7 (Seven) days of Letter of Intent, the Contractor shall submit a Time and Progress Chart (CPM/PERT/Quantified Bar Chart) and get it approved by the Engineer-In-Charge. The Chart shall be prepared in direct relation to the time stated in the contract documents for completion of items of the works (Schedule D of Contract Data). It shall indicate the forecast (mile-stones) of the dates of commencement and completion of various items, trades, sections of the work and may be amended as necessary by agreement between the Engineer-In-Charge and the Contractor within the limitations of time stipulated in the Contract documents. The physical report including photographs shall be submitted by the Contractor on the prescribed format & the intervals (not exceeding a month) as decided by the Engineer in Charge. The compensation for delay as per Clause -25 shall be leviable at intermediate stages also, in case the required progress is not achieved to meet the above time deadlines of the completion period and/ or milestones of time and progress chart.

If the work(s) be delayed by:

i) force-majeure or
ii) serious loss or damage by fire, or
iii) civil commotion of workmen, strike or lockout, affecting any or the trades employed on the work, or
iv) delay on the part of other Contractors or tradesmen engaged by Engineer-In-Charge in executing work not forming part of the Contract, or

vi) any other cause which, in the absolute discretion of EPI, is beyond the Contractor's control, then, upon the happening of any such event causing delay, the Contractor shall immediately give notice thereof in writing to the Engineer-In-Charge but shall nevertheless use constantly his best
endeavors to prevent or make good the delay and shall do all that may be reasonably required to the satisfaction of the Engineer-In-Charge to proceed with the works.

42.3 Request for extension of time, to be eligible for consideration, shall be made by the Contractor in writing within fourteen days of the happening of the event causing delay on the prescribed form. The Contractor may also, if practicable, indicate in such a request the period for which extension is desired. In any such case EPI may give a fair and reasonable extension of time for completion of work. Such extension shall be communicated to the Contractor by the Engineer-In-Charge in writing, within 3 months of the date of receipt of such request. Nonapplication by the Contractor for extension of time shall not be a bar for giving a fair and reasonable extension by the Engineer-In-Charge and the extension of time so given by the Engineer-In-Charge shall be binding on the Contractor.

43 Deviation, extra items and pricing

In the case of extra item(s) the contractor may within fifteen days of receipt of order or occurrence of the item(s) claim rates, supported by proper analysis, for the work and the Engineer-In-Charge of EPI shall within one month of the receipt of the claims supported by analysis, after giving consideration to the analysis of the rates submitted by the contractor, determine the rates on the basis of the market rates/other prevailing codes as approved EPI's Client and the contractor shall be paid in accordance with the rates so determined.

44 Deviation, substituted items, pricing

In the case of substituted items, the rate for the agreement item (to be substituted) and substituted item shall also be determined in the manner as mentioned in the aforesaid para.

(a) If the market rate for the substituted item so determined is more than the market rate of the agreement item (to be substituted) the rate payable to the contractor for the substituted item shall be the rate for the agreement item (to be substituted) so increased to the extent of the difference between the market rates of substituted item and the agreement item (to be substituted).

(b) If the market rate for the substituted item so determined is less than the market rate of the agreement item (to be substituted) the rate payable to the contractor for the substituted item shall be the rate for the agreement item (to be substituted) so decreased to the extent of the difference between the market rates of substituted item and the agreement item (to be substituted).
Deviation, Deviated Quantities, Pricing

(a) In the case of contract items, substituted items, contract cum substituted items, which exceed the limits laid down in Schedule C of Contract Data, the contractor may within fifteen days of receipt of order or occurrence of the excess, claim revision of the rates, supported by proper analysis, for the work in excess of the above mentioned limits; provided that if the rates so claimed are in excess of the rates specified in the schedule of quantities the Engineer-In-Charge of EPI shall within one month of receipt of the claims supported by analysis, after giving consideration to the analysis of the rates submitted by the contractor, determine the rates on the basis of the market rates/other prevailing codes as approved by EPI’s Client and the contractor shall be paid in accordance with the rates so determined.

(b) The provisions of the preceding paragraph shall also apply to the decrease in the rates of items for the work in excess of the limits laid down in Schedule C of Contract Data and the Engineer-In-Charge of EPI shall after giving notice to the contractor within one month of occurrence of the excess and after taking into consideration any reply received from him within fifteen days of receipt of the notice, revise the rates for the work in question within one month of expiry of the said period of fifteen days having regard to the market rates or current schedule of rate or other prevailing codes as approved by EPI’s Client.

(c) The contractor shall send to the Engineer-In-Charge once every three months an up to date account giving complete details of all claims for additional payments to which the contractor may consider himself entitled and of all additional work ordered by the Engineer-in-Charge of EPI which he has executed during the preceding quarter failing which the contractor shall be deemed to have waived his right.

(d) For the purpose of operation of Schedule - D of Contract Data the following works shall be treated as works relating to foundation:

i) For buildings, compound walls plinth level or 1.2 meters (4 feet) above ground level whichever is lower excluding items of flooring and D.P.G. but including base concrete below the floors.

ii) For abutments, piers, retaining walls of culverts and bridges, walls of water reservoirs the bed of floor level.

iii) For retaining walls where floor level is not determinate 1.2 meters above the average ground level or bed level.

iv) For Roads all items of excavation and filling including treatment of sub-base.

(e) Any operation incidental to or necessary has to be contemplation of tenderer while filing tender, or necessary for proper execution of the item included in the Schedule of quantities or in the schedule of rates mentioned above,
whether or not, specifically indicated in the description of the item and the relevant specifications, shall be deemed to be included in rates quoted by the tenderer or the rate given in the said schedule of rates, as the case may be, Nothing extra shall be admissible for such operations.

**Action in case work not done as per Specifications**

All works under or in course of execution or executed in pursuance of the contract shall at all times be open and accessible to the inspection and supervision of the Engineer-in-Charge, his authorized representative in charge of the work and all the superior officers, officer of the quality Control Organisation of EPI / EPI’s client and of the cabinet (Technical) Vigilance, and the contractor shall, at all times, during the usual working hours and at all other times at which reasonable notice of the visit of such officers has been given to the Contractor either himself be present to receive orders and instructions or have a responsible agent duly accredited in writing, present for that purpose, Orders given to the Contractor's agent shall be considered to have the same force as they had been given to the contractor himself.

if it shall appear to the Engineer-In-charge of EPI or his higher authority or his authorised subordinates in charge of the work or to the Cabinet (Technical) Vigilance or his subordinate officers, that any work has been executed with unsound, imperfect or unskilful workmanship, or with materials or article provides by him for the execution of the work which are unsound or of a quality inferior to that contracted or otherwise not In accordance with the contract the contractor shall, on demand in writing which shall be made within the period specified in schedule - D of contract data from the Engineer-in-charge of EPI specifying the work, materials or articles complained of notwithstanding that the same may have been passed, certified and paid for forthwith rectify, or remove and reconstruct the work so specified in whole or in part, as the case may require or as the case may be, remove the materials or articles so specified and provide other proper and suitable materials or articles at his own charge and cost. In the event of the contractor, failing do so within a period specified by the Engineer-in-Charge of EPI in his demand aforesaid, then the contractor shall be liable to pay compensation at the same rate as under clause - 25of ACC of the contract ( for non-completion of the work in time ) for this default.

In such case the Engineer-in-charge may not accept the item of work at the rates applicable under the contract but may accept such items at reduced rates as the competent authority may consider reasonable during the preparation of on account bills or final bill if the item is so acceptable without detriment to the safety and utility of the item and the structure and incidental items rectified, or removed and re-executed at the risk and cost of contractor. Decision of the Engineer-in-Charge to be conveyed in writing in respect of the same will be final and binding on the contractor.
**Contractor Liable for Damages, defects during maintenance period**

If the contractor or his working people or servants shall break, deface, injure or destroy any part of building in which they may be working, or any building, road, road curb, fence, enclosure, water pipe, cables, drains, electric or telephone post or wired, trees, grass or grassland, or cultivated ground contiguous to the premises on which the work or any part is being executed, or if any damage shall happen to the work while in progress, from any cause whatever or if any defect, shrinkage or other faults appear in the work within defect liability period after a certificate final or otherwise of its completion shall have been given by the Engineer-in-charge of EPI as aforesaid arising out of defect or improper materials or workmanship the contractor shall upon receipt of a notice in writing on that behalf make the same good at his own expense or in default the Engineer-in-charge of EPI cause the same to be made good by other workmen and deduct the expense from any sums that may be due or at any time thereafter may become due to the contractor, or from his security deposit or the proceeds of sale thereof or of a sufficient option thereof. The security deposit of the contractor shall not be refunded before the expiry of defect liability period after the issue of the certificate final or otherwise, of completion of work, or till the final bill has been prepared and passed whichever is later.

In case of Maintenance and Operation works of Electrical & Mechanical services, the security deposit deducted from contractors shall be refunded within one month from the date of final payment or within one month from the date of completion of the defect liability period whichever is earlier.

**Recovery of Compensation paid to Workman**

In every case in which by virtue of the provisions sub-section (1) of Section 12, of the Workmen’s Compensation Act, 1923, EPI is obliged to pay compensation to workman employed by the contractor, in execution of the works, EPI will recover from the contractor the amount of the compensation so paid, and without prejudice to the right of the EPI under sub-section (2) of section 12, of the said Act. EPI shall be at liberty to recover such amount or any part thereof by deducting it from the security deposit or from any sum due by EPI to the contractor whether under this contract or otherwise. EPI shall not be bound to contest any claim made against it under sub section (1) Section 12, of the said Act. Except on the written request of the contractor and upon his giving to EPI full security for all costs for which EPI might become liable in consequence of contesting such claim.

**Ensuring payment and amenities to workers if contractor fails**

In every case in which by virtue of the provisions of the Contract Labour (Regulation and Abolition) Act, 1970 and of the Contract Labour (Regulation and Abolition) Central Rules, 1971, EPI is obliged to pay any amounts of wages to a workman employed by the contractor in execution of the works, or
to incur any expenditure in providing welfare and health amenities required to be provided under the above said Act and the rules under Clause 19H or under the P.W.D. Contractor's Labour Regulations, or under the Rules framed by EPI/EPI's Client from time to time for the protection of health and sanitary arrangements for workers employed by contractors, EPI will recover from the contractor the amount of wages so paid or the amount of expenditure so incurred; and without prejudice to the rights of the EPI under sub-section (2) of section 20, and sub-section (4) of section 21, of the Contract labour (Regulation and Abolition) Act, 1970, EPI shall be at liberty to recover such amount or any part thereof by deducting it from the security deposit or from any sum due by EPI to the contractor whether sunder this contract or otherwise EPI shall not be bound to contest any claim made against it under sub-section (1) of Section 20, sub-section (4) of Section 21, of the said Act, except on the written request of the contractor and upon his giving to EPI full security for all costs for which EPI might become liable in contesting such claim.

**Recovery against Labour Safety**

In respect of all labour directly or indirectly employed in the work for the performance of the contractor’s part of this contract, the contractor shall at his own expense arrange for the safety provisions as per PWD, Bihar Safety Code framed from time to time and shall at his own expense provide for all facilities in connection therewith. In case the contractor fails to make arrangement and provide necessary facilities as aforesaid he shall be liable to pay a penalty of ` 200/- for each default and in addition the Engineer-in-Charge shall be at liberty to make arrangement and provide facilities as aforesaid and recover the costs incurred in that behalf from the contractor.

**Compensation**

All Sums payable by way of compensation under any of these conditions shall be considered as reasonable compensation to be applied to the use of Government without reference to the actual loss or damage sustained and whether or not any damage shall have been sustained.

**Approval of Engineer-in-charge**

All works to be executed under the contract shall be executed under the direction and subject to the approval in all respects of the Engineer-In-Charge who shall be entitled to direct at what point or points and in what manner they are to be commenced, and from time to time carried on.

**Contractor to indemnify Govt. against Patent Rights**

The contractor shall fully indemnify and deem indemnified EPI against any action, claim or proceeding relating to infringement or use of any patent or design or any alleged patent or design rights and shall pay any royalties which
may be payable in respect of any article or part thereof included in the contract. In the event of any claims made under the action brought against EPI in respect of any such matter as aforesaid the contractor shall be immediately notified thereof and the contractor shall be at liberty, at his own expenses, to settle any dispute or to conduct any litigation that may arise therefrom, provided that the contractor shall not be liable to indemnify EPI/EPI's Client if the infringement of the patent or design or any alleged patent or design right is the direct result of an order passed by the Engineer-in-Charge of EPI/EPI's Client in this behalf.

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Unfiltered water supply

The contractor(s) shall make his / their own arrangement for water required for the work and nothing extra will be paid for the same. This will be subject to the following conditions.

i) That the water used by the contractor(s) shall be fit for construction purposes to the satisfaction of the Engineer-in-Charge of EPI/EPI's client.

ii) The Engineer-in-charge of EPI shall make alternative arrangements for supply of water at the risk and cost of contractor(s) if the arrangements made by the contractor(s) for procurement of water are in the option of the Engineer-in-Charge of EPI/EPI's Client, unsatisfactory.

55

Employment of Technical Staff and employees

Contractors Superintendence, Supervision, Technical Staff & Employees:

i) The contractor shall provide all necessary Superintendence during execution of the work and as along thereafter as may be necessary for proper fulfilling of the obligations under the contract.

The contractor along with bidding of the tender, intimate in writing to the Engineer-in-Charge of EPI the name, qualifications, experience, age, address and other particulars along with certificates, of the technical representative to be in charge of the work. The Engineer-in-charge of EPI shall within 15 days of issue of letter of acceptance intimate in writing his approval or otherwise it is deemed to be approved. Any such approval may at any time be withdrawn and in case of such withdrawal the contractor shall appoint another such representative according to the provisions of this clause. Decision of EPI shall be final and binding on the contractor in this respect. Technical staff shall be available at site within fifteen days of start of work.

If the contractor (or any partner in case of firm / company) himself has such qualifications, it will not be necessary for the said contractor to appoint such a principal technical representative but the contractor shall designate and appoint a responsible agent to represent him and to be present at the work.
whenever the contractor is not in a position to be so present. All the provisions applicable to the principal technical representative under the Clause will also be applicable in such a case to contractor or his responsible agent. The principal technical representative and / or the contractor or his responsible authorized agent shall be actually available at site at least two working days every week, these days shall be determined in advance and also during recording of measurement of works and whenever so required by the Engineer-in-Charge of EPI by a notice as aforesaid and shall also note down instructions conveyed by the Engineer-in-Charge of EPI or his designated representative in the site order book and in token of acceptance of measurements. There shall be no objection if the representative / agent look after more than one work and not more than three works in the same station provided these details are disclosed to the Engineer-in-Charge of EPI and he shall be satisfied that the provisions and the purpose of the clause are fulfilled satisfactorily.

If the Engineer-in-Charge of EPI, whose decision in this respect is final and binding on the contractor, is convinced that no such technical representative or agent is effectively appointed or is effectively attending or fulfilling the provision of this clause, a recovery shall be effected from the contractor as specified in Schedule ‘D’ and the decision of the Engineer-in-Charge of EPI as recorded in the site order book and measurement recorded in Measurement Books shall be final and binding on the contractor. Further it the contractor fails to appoint suitable technical representative or responsible agent and if such appointed persons are not effectively present or do not discharge their responsibilities satisfactorily, the Engineer-in-Charge of EPI shall have full powers to suspend the execution of the work until such date as a suitable agent is appointed and contractor shall submit a certificate of employment of the technical representative / responsible agent along with every on account bill / fixed bill and shall produce evidence if at any time so required by the Engineer-in-Charge of EPI.

ii) The contractor shall provide and employ on the site only such technical assistants as are skilled and experienced in their respective fields and such foremen and supervisory staff as are competent to give proper supervision to the work.

The contractor shall provide and employ skilled, semiskilled and unskilled labour as is necessary for proper and timely execution of the work. The Engineer-in-Charge of EPI shall be at liberty to object to and require the contractor to remove from the works any person who in his opinion misconducts himself, or is incompetent or negligent in the performance of his duties or whose employment is otherwise considered by the Engineer-in-Charge of EPI to be undesirable, such person shall not be employed again at works site without the written permission of the Engineer-in-Charge of EPI and the persons so removed shall be replaced as soon as possible by competent substitutes.
56  **Levy/Taxes payable by Contractor**

i)  The contractor shall deposit royalty and obtain necessary permit for supply of the red earth, moorum, sand chips bajri, stone, kankar, etc. from local authorities.

ii)  If pursuant to or under any law, notification or order any royalty, cess of the hike becomes payable to the Government of India and does not at any time become payable by the contractor to the State Government/Local authorities in respect of any material used by the contractor in the works then in such a case, it shall be lawful to the Government of India and it will have the right and be entitled to recover the amount paid in the circumstances as aforesaid from the dues of the contractor.

57  **Conditions for reimbursement of levy/taxes if levied after receipt of tenders**

i)  All tendered rates shall be inclusive of all taxes and levies payable under respective statutes. However, pursuant to the Constitution (46th Amendment) Act, 1982, if any further tax or levy is imposed by Statute, after the last stipulated date for the receipt of tender including extensions if any and the contractor thereupon necessarily and properly pays such taxes/levies the contractor shall be reimbursed the amount so paid, provided such payments, if any, is not, in the opinion of the Chief Engineer (whose decision shall be final and binding on the contractor) attributable to delay execution of work within the control of the contractor.

ii)  The contractor shall keep necessary books of accounts and other documents for the purpose of this condition as may be necessary and shall allow inspection of the same by Engineer–in-Charge of EPI or his duly authorized representative as may be required from time to time.

iii)  The contractor shall, within a period of 30 days of the imposition of any such further tax or levy, pursuant to the Constitution (Forty Sixth Amendment) Act 1982, give a written notice thereof to the Engineer-in-Charge of EPI that the same is given pursuant to this condition, together with all necessary information relating thereto.

58  **Release of Security deposit**

On completion of the whole of the work, half of the total amount of security shall be repaid to the contractor after six months of completion. However, the balance half of the total amount of security will be returned after completion of defect liability period and after the Engineer-in-charge or his authorized representative has certified that all defects notified by him to the contractor before the end of this period have been corrected and also after recovery of any dues.
Responsibility of Technical Staff and employees

Technical officers/staff deployed by the contractor at any construction site will also be responsible for inferior quality/poor performance of any work and his name will be circulated to all works places of EPI to debar from any other site, if his name is being proposed by other contractor.

Contractor's risks

All risks of loss of or damage to physical property and of personal injury and death which arise during and in consequence of the performance of the contract other than the excepted risks are the responsibility of the contractor.

Covering up of Contract Works

No part of the contract works shall be covered up without the approval of the EPI/EPI’s client and the contractor shall afford full opportunity for examination and inspection by EPI / EPI’s client.

The Contractor shall give due notice to EPI about the works to be covered up for their measurement and examination. EPI shall within a reasonable time attend for the purpose of examining such work, unless the contractor is specifically advised in writing of EPI’s willingness not to attend such examination in which case the contractor may proceed further with contract works.

Site Order Book

The contractor shall maintain a site order book at site of the work. Any special orders and instructions to be issued to the contractor at site will be recorded in this book which will be numbered and initialed by EPI/EPI’s client. The contractor will however sign all the orders as a token of information received by him and take action accordingly.

Specifications

Those items for which detailed specifications have not been included in the contract document shall be executed as per relevant B.S. or as mentioned in the respective specification or as per the Standard Construction practices and/or as per the instructions/ suggestions of EPI/EPI’s client.

Cash Flow Estimate to be submitted

The Contractor shall submit a detailed cash flow estimate to the Engineer-in-charge of EPI for his information in quarterly periods, of all payments to which the Contractor will be entitled under the Contract and the Contractor shall subsequently submit revised cash flow estimates at quarterly intervals, if required to do so by the Engineer-in-charge of EPI.
Inspection and Testing

As and when required by EPI / EPI's client, the contractor shall provide all facilities for inspection of contract works and materials at his own cost.

All materials shall be of highest standard, quality and kind. All requisite cost as per IS/Tender stipulations are to be carried out by the contractor at his own cost and results submitted to EPI. This, however, does not absolve the contractor from his responsibility for the overall quality, kind, strength and stability of the structures.

Safety, Security and protection of the Environment

The Contractor shall, throughout the execution and completion of the works and theremedying of any defects therein:

 Guarantee

All guarantees and test certificate for the entire work shall be transferred to EPI/EPI's client by the contractor on virtual/interim completion of the work.

All guarantees shall be for the values and duration as mentioned in specification/item description.

Language

All correspondence, drawings and notations relating to this Contract must be in English.

Water Supply

The contractor shall make their own arrangements for water required for construction as well as for drinking and other purposes for their staffs and labour and the personnel of EPI / EPI's Client.

Electricity

i) Contractor shall obtain temporary power connection from Local Authorities at his cost for construction purposes.

ii) Contractor shall make his own arrangements for further distribution as per their requirement and also the requirement of EPI and cost of cables switches, fuses, meters etc. shall be borne by contractor. It is to be noted that power from local authority may not be continuous and there may be possibilities of disruption of power. Hence contractor shall install sufficient number of generators of adequate capacity duly approved by EPI/EPI's client bearing all operating and installation cost right from the date of commencement of the work in the scope of the contractor.
iii) EPI/EPI’s client reserves the right to supply power at mutually agreed rates as and when sufficient availability of same is attained. Till such time the contractor shall be required to supply power to EPI/EPI’s client/such vendors as EPI /EPI’s client desires at mutually agreed rates.

iv) Contractor shall provide power free of cost to the temporary office facilities of EPI, EPI’s client, Consultant as required.

71 Gate keeper & Watchman

The Contractor shall provide, maintain at his own expense gate keepers and watchmen to ensure at all times effective protection of the works, materials and workmen, until completion of the project, at his own risk and cost.

72 Recovery

Any amount found recoverable from the contractor shall be recovered without prejudice to any other mode of recovery.

In case of difference or ambiguity in Hindi an English version the English version will prevail.

73 FACILITIES TO BE PROVIDED BY CONTRACTOR

Deleted

74 Approval from Client

The CONTRACTOR shall be responsible for obtaining all approvals from Client with regard to quality of materials & workmanship and measurements etc. for their portion of work. All such approvals shall be in the name and title of EPI.

75 Mobilization of Men/Material / Machinery

Sole responsibility rest with the contractor for procurement/ mobilization of all men, materials, machinery, tools and plants, infrastructure etc. as required for execution of “Works” for their portion of work. All transportation charges, electricity and water charges and all expenses such as site offices expenses, labour camp, bank guarantee charges, EPF/CPF/Statutory contributions preparation of all required design & detailed engineering and all required drawings etc., facilities and other expenses whatsoever, incurred on execution, completion and maintenance of the “Works” as per ‘Tender Documents’ and their own overheads and profit etc. are included in the quoted price. The CONTRACTOR shall comply with all the requirements laid down as per ‘Tender Documents’ and shall unconditionally abide by its offer quoted for execution of “Works” as per terms, conditions, specifications, drawings, documents etc. given in the ‘Tender Documents’ for the completion, handing over, maintenance period etc. for the project.
Contractors Use of Sites

The Contractor is restricted to construction sites as marked on the drawings for the execution of the work. Contractor must obtain approval from EPI before proceeding with work outside.

Project Meetings

1. Hold project meetings at times and locations approved by EPI/EPI's client.
2. Notify participants of meetings.
3. Contractor shall record minutes of meetings and distribute to participants within 3 days of meeting.

Setting Out of Work

1. Assume full responsibility for and execute complete layout of work to locations, lines and elevations indicated.
2. Provide devices needed for layout and construction work.
3. Supply stakes and other survey markers required for laying out work.

Location of Equipments and Fixtures

1. Location of equipment, fixtures and outlets indicated or specified are to be considered as approximate.
2. Locate equipment, fixtures and distribution systems to provide minimum interference and maximum useable space and in accordance with manufacturer's recommendations for safety, access and maintenance.
3. Inform EPI of impending installation and obtain their approval for actual location.
4. Submit field drawings to indicate relative position or various services and equipment when required by EPI/EPI's Client.

Concealment

Contractor shall conceal pipes, ducts and wiring in floor, wall and ceiling construction of finished areas except where indicated otherwise.

Cutting & Patching

1. Contractor shall obtain approval of EPI/EPI's client before cutting, boring or sleeving load-bearing members.
2. Cut and patch as required to make work fit.
3. Make cuts with clean, true, smooth edges.
4. Where new work connects with existing and where existing work is altered, cut, patch and make good to match existing work.
Billing Documents

Following documents shall be enclosed by contractor along with submission of each bill otherwise the same shall not be accepted by EPI for checking and certification of payment.

a. Monthly progress reports in the format as issued by EPI/EPI’s client– the sample report is available with EPI/EPI’s client for Contractor's reference.

b. Cube test reports.

c. Safety measurement certificate.

d. All the information/documents contained in relevant check lists. Formats for (b), (c) and (d) shall be provided to the contractor by EPI.

Brand Name

The specific reference in the Specifications and documents to any material by trade name, make or catalogue number shall be construed as establishing standard or quality and performance and not as limited competition. However, contractor may offer other similar equipments/material, provided it meets the specified standard design & performance requirements subject to approval by EPI / EPI’s client.

Co-ordination Drawings

This is a Percentage Rate base contract. Therefore it shall be the Contractors responsibility to ensure complete co-ordination between works of various agencies such as Civil, Electrical, Utilities, Plumbing etc. The Contractor shall deemed to have considered this aspect carefully while quoting percentage.

Site Meetings

Site meetings shall be held at regular intervals and in addition to other meeting required by EPI/EPI’s client. There shall be at least one site meeting per fortnight in the presence of EPI/EPI’s client to discuss and co-ordinate the work. The Contractor shall provide responsible member of his organization who is authorized to commit and bind the contractor to any agreement reached during said meeting.

Submission of Manuals / Catalogues

Maintenance manuals, product catalogues, all warranties and guarantees against each section of work shall be submitted hardbound in triplicate on completion as per direction of EPI.

Shop Drawings

The Contractor shall submit shop/fabrication drawings for all services and works like Aluminium / Structural steel works / Electrical Conduit Layout etc as required and desired by EPI/EPI’s client. Nothing extra shall be paid on this account.
Measures to be followed for protection and preservation of landscape

a) Avoid or limit major construction activity during monsoon season to minimize and avoid soil erosion due to rain fall.

b) Contractor to prepare soil erosion and sedimentation control plan and waste/scrap reuse plan before starting construction activity and submit the same for EPI/EPI’s client / GRIHA consultant approval. The plan is to be prepared as per following parameters and is to be applied effectively during the whole construction phase:

i) At least two or more sedimentation basin should be constructed to store the calculated volume of runoff. The location of the basins to be selected by considering topography and slope of the site.

ii) The sedimentation basins should be located at the lowest convenient points and connected to storm water drains.

iii) Temporary sedimentation pits of the following dimensions:
- Min. volume: 1559.25 CU.M
- No. of Pits: 4, size (8m x 10 x 5 m), Side slope 1:2 of l: 1.35.

iv) Temporary seeding, Mulching, Sedimentation trap, staging around construction area with level different/temp. drain channel and other methods need to be adopted and shown in the plan.

Plan to be submitted

Contractor to submit a construction activity, material storage and vehicular movement plan before starting construction and submit the same for EPI/EPI’s client/GRIHA consultant approval. The plan is to be prepared to ensure the following and is to be applied effectively during the whole construction phase:

i) Demarcate area on the site plan to which the site activities would be limited during construction by the contractor. The demarcated area should be separated from the rest of the site through a physical barrier.

ii) Construction materials such as sand, aggregate etc. to be stored in demarcated areas within low height enclosures to limit spillage, waste and site contamination due to winds.

iii) Control plan clearly stating measures to stop and contain spills, to dispose off contaminated material and hazardous waste (hazardous waste include pesticides, paints, cleaner and petroleum products etc.) cover all loose stored material with geo-textile or any impervious fabric/covering.

iv) Location should be identified on the construction site to store the used/scrap wastes. Both these wastes should be separately stored in Bins and handed over to authorized agencies for safe disposal.
**Preservation of tree/vegetation**

Existing trees and other forms of vegetation to be preserved by avoiding disturbance/damage due to construction activities. All existing vegetation should be marked on the site survey plan. The tree survey must be carried out and data must be recorded before starting construction activities. Adequate fencing to avoid disturbance / damages to trees/other vegetation to be provided.

**Top Soil Preservation**

Adequate measures to excavate, preserve, maintain fertility and lay back top soil for minimum compacted depth of 300mm as per GRIHA consultant guidelines to be followed by the contractor.

**Sanitation/safety facilities for construction workers**

Provision for basic facilities of sanitation & drinking water and safely construction works, safety of equipment and machinery etc. as per the various guidelines laid down in the National Building Code 2005 for construction safety for construction workers and for Health and Sanitation facilities for workers/working residing on site. This to include, but not limited to, safety equipment (safety helmets, jackets, boots, gloves etc), safety nets/harnesses, appropriate warning/safety signs, fire extinguishers, adequate light for working during evenings/nights, regular maintenance and repairs of machinery/equipments and adequate sanitation/potable drinking water facilities.

**Controlling Air Pollution**

(i) Provide action plan to reduce and restrict Air Pollution during construction. Necessary measures such as hoarding/sheeting/dust screens around site/construction area, mulching/gravel stoning of pedestrian movement paths, limit vehicular movement paths/ parking areas (which should be hard paved or graveled) spraying water etc. to reduce dust pollution on site to be submitted for EPI/EPI’s client / GRIHA consultant approval and to be effectively followed during construction phase.

(ii) Vehicles with dusty loads to be covered with impervious sheeting before they enter or exit the site.

(iii) All Gensets used should meet recommended pollution norms and should be maintained properly. Min. stack height based on building height and DG Set capacity to be provided and spillage of fuel/lubricant to be controlled.
**Technical**

(I) Flow rates of C.P. Brass bib cock should be at 80 psi for all fixtures & faucets.

(II) Flow rates of PVC flushing cistern (dual flushing system) should be (6/3) litres.

(III) The Fly ash content/ percentage in PPC/RMC used for structural/non structural/ mortar masonry/ plastering etc should be recorded in separate register.

**ShopDrawings, Product Data**

1. Shop Drawings are drawings, diagrams, schedules and other data specially prepared for the work by the Contractor or a Subcontractor, Sub-subcontractor, manufacturer, supplier or distributor to illustrate some portion of the work.

2. Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by the Contractor to illustrate materials or equipment for some portion of the work.

3. Samples are physical examples which illustrate materials, equipment or workmanship and establish standards by which the work will be judged.

4. Shop Drawings, Product Data, Samples and similar submittals are not Contract Documents. The purpose of their submittal is to demonstrate for those portions of the Work for which submittals are required the way the Contractor proposes to conform to the information given and the design concept expressed in the Contract Documents.

5. The Contractor shall review, approve and submit to EPI Shop Drawings, Product Data, Samples and similar submittals required by the Contract Documents with reasonable promptness and in such sequence as to cause no delay in the work or ill the activities of EPI or of separate contractors. Submittals made by the Contractor which are not required by the Contract Documents may be returned without action. For record keeping purposes, on all submittals the Contractor shall indicate the date the Contractor received or created each submittal and the date it was transmitted to EPI. EPI shall not be required to take any action on any submittal and the date it was transmitted to EPI. EPI shall not be required to take any action on any submittal not showing such dates. Any transmittal of any submittal by the Contractor to EPI constitutes a representation that the Contractor has reviewed and approved the submittal whether or not such dating procedures are followed.

6. The Contractor shall perform no portion of the work requiring submittal and review of Shop Drawings, Product Data, Samples or similar submittals until the respective submittal has been approved by EPI/EPI's
client. Such work shall be in accordance with approved submittals

7. By approving and submitting Shop Drawings, Product Data, Samples and similar submittals, the Contractor represents that the Contractor has determined and verified materials, field measurements and field construction criteria related thereto, or will do so and has checked and co-ordinated the information contained within such submittals with the requirements of the work and the Contract Documents.

8. The contractor shall not be relieved of responsibility for deviations from requirements or the contract Documents by EPI/EPI's client approval of Shop drawings, Product Data, samples or similar submittal unless the contractor has specifically informed EPI in writing of such deviation at the time of submittal and EPI has given written approval to the specific deviation. The Contractor shall not be relieved of responsibility for errors or omissions in Shop Drawings, Product Data, Samples or similar submittals by EPI's approval thereof.

9. The Contractor shall direct specific attention, in writing or on resubmitted Shop Drawings; Product Data, Samples or similar submittals to revisions other than those requested by EPI on previous submittals.

10. When professional certification of performance criteria of materials, systems or equipment is required by the Contract Documents, EPI shall be entitled to rely upon the accuracy and completeness of such calculations and certifications. EPI may advise the Contractor of alternatives relating to equipment or systems designed by the Contractor for the sole purpose of providing to the Contractor additional information which the Contractor may choose to utilize in the Contractor's design. The Contractor shall evaluate the alternatives in terms of its original design and assess whether to incorporate any of them; the design of such systems or equipment is to remain the exclusive responsibility of the Contractor. Any subsequent action taken on submittals or any certification made by EPI/EPI's client, as contemplated in the Contract Documents, shall not constitute an approval of or representation by EPI of the appropriateness of the systems or equipment designed by the Contractor or the Contractor's decision whether to utilize alternatives of which the Contractor was advised by EPI.

11. Without limiting the generality of any related provision contained in any other Contract Documents, the Contractor to the fullest extent possible under applicable statutory and common law, hereby disclaims any and all copyright or other intellectual property rights in the Shop Drawings or any other materials produced by Contractor pursuant to the execution of the contract and hereby acknowledges and agrees that all such copyright or other intellectual property right shall vest solely and absolutely in EPI/EPI's client.

12. Top soil must be tested for its fertility value by an accredited laboratory and also effective stabilization measures to be taken to avoid erosion from slope/erosion-prone areas.

13. Segregation and storage of inert and hazardous waste and its safe
disposal during construction phase to be done.

14. For efficient use of water during construction measures to be taken to reduce water consumption during construction activity by use of premixed concrete, curing chemicals, covering structures by gunny bags etc.

96 **Testing Laboratory Services**

Related Requirements Specified Elsewhere

Particular requirements for inspection and testing to be carried out by testing laboratory designated by EPI/EPI’s client are specified under various sections.

97 **Appointment & Payment**

1. EPI will appoint and pay for services of testing laboratory except for the following:

   (i) Inspection and testing required by laws, ordinances, rules, regulations or orders of public authorities.
   (ii) Inspection and testing performed exclusively for Contractor’s convenience.
   (iii) Testing, adjustment and balancing of conveying systems, mechanical and electrical equipment and systems.
   (iv) Mill tests and certificates of compliance.
   (v) Tests specified to be carried out by Contractor under the supervision of Engineer. Contractor shall produce Laboratory Test Reports for all the materials supplied by him. However, Contractor shall be reimbursed for the Laboratory Tests specifically performed for materials supplied by EPI /EPI’s client. For each fresh material supply during the currency of construction contractor shall arrange and get the same tested through approved laboratory at no additional cost.

2. Where tests or inspections by designated laboratory reveal work not in accordance with contract requirements, Contractor shall pay costs for additional tests or inspections as EPI may require to verify acceptability of corrected work.

98 **Contractor’s Responsibilities**

1. Furnish labour and facilities to:

   i) Provide access to work to be inspected and tested.
   ii) Facilitate inspections and tests.
   iii) Make good work disturbed by inspection and test.
   iv) Provide storage on site for laboratory’s exclusive use to store equipment and cure test samples.
   v) Provide all test equipments required for carry out field tests.
2. Notify EPI sufficiently in advance of operations to allow for assignment of laboratory personnel and scheduling of test.

3. Where Materials are specified to be tested, deliver representative samples in required quantity to testing laboratory.

4. Pay costs for uncovering and making good work that is covered before required inspection or testing is completed and approved by EPI/EPI’s client.

99

House Keeping

General:

1. Conduct cleaning and disposal operations to comply with local dinances and antipollution Jaws.
2. Store volatile waste in covered metal containers and remove from premises at the end of each working day.
3. Provide adequate ventilation during use of volatile or noxious substances. Use of building ventilation systems is not permitted for this purpose.

Materials:

Use only cleaning materials recommended by manufacturer of surface to be cleaned and as recommended by cleaning material manufacturer.

Cleaning during:

i) Provide on-site containers for collection of waste materials and debris
ii) Dispose of waste materials and debris off site.
iii) Schedule cleaning operations so that resulting dust, debris and other contaminants will not fall on wet, newly painted surfaces nor contaminate building systems

Final Cleaning:

i) Remove grease, dust, dirt, stains, labels, fingerprints and other foreign materials, from interior and exterior finished surfaces including glass and other polished surfaces.
ii) Clean lighting reflectors, lenses and other lighting surfaces.
iii) Broom clean paved surfaces: rake clean other surfaces of grounds.
iv) Remove debris and surplus materials from crawl areas and other accessible concealed spaces.
**Project Record Documents**

Record Drawings (As built drawings)

i) Contractor shall provide four sets of as built drawings. One set shall be reproducible transparency on plastic film and two cp's. The above requirements are apart from the requirement of municipal authorities, which are also to be met by the Contractor.

ii) Maintain project record drawings and record accurately deviations from Contract documents.

iii) Record changes in red. Mark on one set of prints and at completion of project and prior to final inspection by Engineer, neatly transfer notations to second set and submit both sets to EPI.

iv) Record following information:

   a. Depths of various elements of foundation in relation to datum.
   b. Horizontal and vertical location of underground utilities and appurtenances referenced to permanent surface improvement.
   c. Location of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of structure.
   d. Field changes of dimension and detail.
   e. Changes made by Site Order/CCN.

v) The above set of as built drawings shall be submitted before submission of final bill.

**Construction Photographs**

1. General

   Provide construction photographs in accordance with procedures and submission requirements specified in this Section.

2. Progress Photographs

   a. Sizes: 200x300mm.
   b. Type: Gloss and colour.
   d. Number of prints required: 3 sets.(EPI / Client / Consultant)
   e. Identification: Typewritten name and number of project and date of exposure on 25x.50mm white patch in upper right hand corner
   f. Viewpoints: Interior and exterior location: viewpoints determined by EPI.
   g. Frequency: Monthly with progress statement or as an when instructed by EPI.
3. Final Photographs
   i) Sizes: 200x300mm.
   ii) Type: Gloss and colour.
   iv) Number of prints required: 4 sets.
   v) Identification: Typewritten name and number of project and date of exposure on reverse side.

4. Number of viewpoints:
   i) Each side of buildings for total of 4 for each building.
   ii) Interior of rooms and finishes for total of 8 for each building.
   iii) Locations of viewpoints determined by Engineer-in-charge.

Arbitration

Both EPI and the CONTRACTOR shall make efforts to settle disputes, if any amicably. Only if amicable settlement is not possible, the same shall be referred to the Sole Arbitration of the Chairman & Managing Director (CMD) of EPI or the person appointed by the CMD, EPI and the decision of the arbitrator shall be final and binding on the “CONTRACTOR”. Arbitration will be as per EPI GCC Clause No. 76.0.

Award of work by EPI to the Contractor is subject to approval by EPI's Client.
CONTEMPLATED CHANGE NOTICE

<table>
<thead>
<tr>
<th>To</th>
<th>Submit Quotation to</th>
<th>Project No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contractor</td>
<td>CCN No</td>
<td></td>
</tr>
<tr>
<td>Sub :</td>
<td>Date</td>
<td></td>
</tr>
</tbody>
</table>

It is proposed to make the following change in the work. You are requested to quote a firm price for any revision to the contract amount arising from the change. No work should be undertaken on this change until a change order / written authorization has been signed and issued.

Quotation to be submitted with 7 days of the date of this notice.

The work shall conform to the contract documents where applicable unless otherwise stated.

Initiator ________________________________________________________________

Reason for Change __________________________________________________________
CHANGE ORDER

Project No. Change Order No.

Location

Description: Construction of Police Building Academy, Rajgir, Dist. Nalanda, Bihar

Consultant:
C P Kukreja Associations
Ashirwad Building
D1, Green Park, New Delhi

Contractors Name and Address

<table>
<thead>
<tr>
<th>Original Contract Amount of Contract</th>
<th>Approved Amount to Date</th>
<th>C.O. Present Amount</th>
<th>C.O. Revised Amount</th>
<th>Contract</th>
</tr>
</thead>
</table>

Description of Change – Refer CNN No.

Recommended by:

Approved by:
CONTRACT DATA
(Schedule F)
Schedule of component of cement, steel, other materials, labour etc. for price escalation (if applicable).

Component of Cement (Pc) - Expressed as percent of total value of work
Component of Steel (Ps) - Expressed as percent of total value of work
Component of Bitumen (Pb) - Expressed as percent of total value of work
Component of Labour (P1) - Expressed as percent of total value of work
Component of P.O.L (Pf) - Expressed as percent of total value of work
Component of Plant & Machinery (Pp) - Expressed as percent of total value of work
Other Material (Pm) -
i) Name of work : Construction of various Buildings at Bihar Police Academy (Civil, Plumbing, electrical and other miscellaneous works)

ii) Estimated cost of work : Rs. 1735 lacs

iii) Earnest Money : Rs. 2736000/-

iv) Performance Guarantee : 2% of tendered value including earnest money.

v) Security Deposit : 10% of tendered value.

vi) Defect Liability period : 36 months from the date of taking over of completed Project by EPI’s Client

vii) Rate of Interest on advance : Not applicable

viii) Officer inviting tender : Group General Manager (Contracts) EPIL, CO, New Delhi
Definitions:

1. Engineer-in-Charge: Refer page 11 of GCC
2. Owner / Employer: Bihar Police Building Construction Corporation, Patna
3. Time allowed for submission of performance Guarantee from the date of issue of letter of Acceptance, in days: 15 days
4. Maximum allowable extension beyond the period: NIL
5. Authority for fixing compensation: Engineer-in-charge of EPI
### TIME FRAME SCHEDULE

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Financial (from date of start)</th>
<th>Onnon achievement of milestone</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>16% (of whole work) 1/4&lt;sup&gt;th&lt;/sup&gt; (of whole work)</td>
<td>In the event of not achieving the necessary progress as assessed from the running payments, 1.5% of the tendered value of work will be withheld for failure of each milestone.</td>
</tr>
<tr>
<td>2.</td>
<td>48% (of whole work) 1/2&lt;sup&gt;th&lt;/sup&gt; (of whole work)</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>75% (of whole work) 3/4&lt;sup&gt;th&lt;/sup&gt; (of whole work)</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>100% (of whole work) Full</td>
<td></td>
</tr>
</tbody>
</table>

Time allowed for execution of work : 8 months

Authority to give fair and reasonable Extension of time for completion of work : Engineer-in-charge of EPI

Gross work to be done together with net Payment/adjustment of advances for material Collected, if any, since the last such payment for being eligible to interim payment : Rs. 100 lakh

Competent Authority for Deciding reduced rates. : Engineer-in-charge of EPI

The law, which applies to the contract, is : The Law of Union of India.

The court of jurisdiction : Kolkata, West Bengal

The language of contract document : English

The currency of the contract is : Indian Rupees
## SCHEDULE ‘E’

**MINIMUM REQUIREMENT OF TECHNICAL STAFF TO BE DEPLOYED AT SITE BY THE PARTY**

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>REQUIREMENT OF TECHNICAL STAFF</th>
<th>Minimum Experience (Years)</th>
<th>Rate of Recovery per month per person(₹)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Project Manager with degree in Civil Engineering</td>
<td>15</td>
<td>₹40,000/-</td>
</tr>
<tr>
<td>2.</td>
<td>Graduate Engineer</td>
<td>5</td>
<td>₹30,000/-</td>
</tr>
<tr>
<td>3.</td>
<td>Graduate Engineer Or Diploma Engineer</td>
<td>Nil</td>
<td>₹20,000/-</td>
</tr>
<tr>
<td>4.</td>
<td>Quality Control Engineer</td>
<td>3</td>
<td>₹15,000/-</td>
</tr>
<tr>
<td>5.</td>
<td>Safety Engineer</td>
<td>3</td>
<td>₹15,000/-</td>
</tr>
</tbody>
</table>