

**CONSTRUCTION OF NEW CTI BUILDING (PORTA CABIN TYPE)
LOCATED AT AIR JHANSI (UP) ON BEHALF OF PRIVATE
BROADCASTERS FOR FM PHASE - III (BATCH – 1)**

**TENDER FOR PRIVATE FM BROADCASTERS FLOATED BY:
BROADCAST ENGINEERING CONSULTANTS INDIA LIMITED
14 – B, RING ROAD, INDRAPRASTHA ESTATE, NEW DELHI – 110002**

Submitted by (Tenderer)

For BECIL

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NOTICE INVITING TENDER

BROADCAST ENGINEERING CONSULTANTS INDIA LIMITED, invites sealed item rate tenders on behalf of Private FM Broadcasters from contractors for the following work :-

NAME OF WORK: Construction of New CTI building (PORTA CABIN TYPE) located at AIR JHANSI (UP) on behalf of Private Broadcasters for FM PHASE - III (BATCH – 1).

Time period: 3 (Three) Months after award of work

Estimated Cost put to bid: - **Rs.39,81,000/-**

Earnest Money Deposit: Rs **80,000/-** in the form of DD / Pay order/ Bankers Cheque in favour of BECIL payable at Delhi/New Delhi

Issue of Tender Documents: 13/04/2016 to 19/04/2016

Last date for submission of Tender: 21/04/2016 up to 2 pm (1400Hrs)

Date of opening of Tender: 21/04/2016 at 02:30 pm (1430Hrs)

Tender documents may be obtained from the corporate office, BECIL BHAWAN, C- 56 / A17, Sector 62, Noida-201307 (U.P) on all working days between 1100 hrs to 1600hrs. on payment of Rs. 500/- (in cash / Pay order / DD in favour of BECIL payable at Delhi / New Delhi.

The tender documents can also be downloaded from BECIL website : www.becil.com. However the agencies have to submit Rs. 500/- in the form of pay order / DD in favour of BECIL Payable at Delhi/ New Delhi towards the cost of tender document.

NOTE: The Tenderer

1. Must have done at least one similar Work of not less than Rs 30 lakhs in one year or two works of not less than Rs 25 lakhs in two years during the period of last 3 years
2. Must have the following Registration / Certificates or any other Certificate required by the Government from Building Contractors.
 - a) PAN no.
 - b) Sales Tax Registration/TIN No.
 - c) Service Tax Registration
3. May visit the site before submission of tender to understand clearly the nature and scope of work involved.
4. Must submit cost of tender document, EMD, work experience and above mentioned certificates in separate envelops at the time of submission of tender document.
5. Tenders of the agencies who do not submit cost of tender document, EMD and the above mentioned certificates shall be rejected.

Tender should be forwarded to:

The Chairman & Managing Director
BROADCAST ENGINEERING CONSULTANTS INDIA LIMITED (BECIL)
C-56 / A-17, SECTOR 62, NOIDA -201307 (U.P)

DECLARATION

TENDER FOR THE WORK of Construction of New CTI building (PORTA CABIN TYPE) located at AIR JHANSI (UP) on behalf of Private Broadcasters for FM PHASE - III (BATCH – 1).

- (i) To be submitted by 14:00 hours on 21/04/2016
- (ii) To be opened in presence of tenderer who may be present at 14:30 hr on 21/04/2016 in the office of CMD, BECIL Noida (UP).
- (iii) Issued to M/s:

Signature of the contractor.....

Designation of issuing authority

TENDER

I/We have read and examined the notice inviting tender, Schedule F, appendix 1, applicable Specifications, BOQ, General conditions of contract, clauses of Contract & other documents and rules referred to in the Clauses of contract and all other contents in the tender document for the work of Construction of New CTI building (PORTA CABIN TYPE) located at AIR JHANSI (UP) on behalf of Private Broadcasters for FM PHASE - III (BATCH – 1).

I/We hereby tender for the execution of the work specified within the time specified in, schedule of quantities and in accordance in all respects with specification, designs, drawings and instructions in writing referred to in the Conditions of Contract and with such materials as are provided for, by, and in respects in accordance with, such conditions so far as applicable. We agree to keep the tender open for sixty (60) days from the due date of its opening and not to make any modifications in its terms and conditions.

A sum of Rs 80,000/- has been deposited by DD/Pay order / Banker's cheque payable to BECIL issued by a schedule bank as Earnest Money. If I/we fail to furnish the prescribed performance guarantee within prescribed period, I/we agree that the said CMD BECIL or his successors in office shall without prejudice to any other right or remedy, be at liberty to forfeit the said earnest money absolutely. Further, if I/we fail to commence work as specified, I/we agree that CMD BECIL or his successors in office shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the said earnest money and the performance guarantee absolutely. Otherwise, the said earnest money shall be retained by him towards security deposit to execute all the works referred to in the tender documents upon the terms and conditions contained or referred to there in and to carry out such deviation as may be ordered, up to a maximum of the percentage mentioned in

Submitted by (Tenderer)

For BECIL.

SCHEDULE 'F' and those in excess of that limit at the rates to be determined in accordance with the provision contained in tender form.

Further, I/We agree that in case of forfeiture of earnest money or both Earnest Money & Performance Guarantee as aforesaid, I/We shall be debarred for participation in the re-tendering process of the work.

I/We hereby declare that I/we shall treat the tender documents drawings and other records connected with the work as secret/confidential documents and shall not communicate information derived there from to any person other than a person to whom I/we am/are authorized to communicate the same or use the information in any manner prejudicial to the State.

Dated

Signature of Contractor

Witness:

Postal Address

Address:

Occupation:

ACCEPTANCE

The above tender is accepted by me for and on behalf of the BECIL for a sum of
Rs.....(Rupees.....
.....)

The letters referred to below shall form part of this Contract Agreement:-

- (a)

- (b)

- (c)

For & on behalf of the BECIL

Signature.....

Designation.....

Dated.....

PREFACE AND SCOPE OF WORK

1.0 PREFACE

- 1.1** M/s BROADCAST ENGINEERING CONSULTANTS INDIA LIMITED (BECIL) propose to get executed the work of Construction of new CTI building (PORTA CABIN TYPE) located at AIR **Jhansi** (UP) on behalf of Private Broadcasters for FM PHASE - III (BATCH – 1).

M/s Environment Design Consultants (EDC), A-194, Gujranwala Town, Part-1, Delhi-110033 are the Architect Consultants to BECIL for this Project. They are in-charge of preparing plans, drawings, specifications etc. advising and assisting BECIL to interpret the tender documents and to carry out inspection of works including structural design and acceptance of such work, checking of bills presented by the Contractor and recommend payment and final settlement of bills.

- 1.2** **TYPE OF WORK/BRIEF:** - The building is a new single storey construction. The construction involves brick work in walls and 50mm puff insulated sandwich panels in roof supported on MS trusses/ purlins etc.

The new building shall be of approximate 3.5 meters height. The work shall include Civil and Electrical works including water supply and sanitary works .Any external development like boundary walls, gates, roads, sewage, storm water lines, septic tanks, overhead water tanks, soak pits, periphery lighting etc are included in the scope of work .

1.3 LIST OF ITEMS TO BE EXECUTED

- a) Cement Concrete work
- b) Brick and Stone masonry work
- c) Reinforced cement concrete work
- d) Painting
- e) Puff panel in roofing
- f) Internal/ External electrical work
- g) Sanitary and water supply works etc.
- h) False Ceiling
- i) MS Structure
- j) Earth Work-(1) Excavation. (2) Back Filling. (3) Earth filling with earth brought from outside.
- k) Cement Plaster
- l) Fire Fighting Equipments
- m) Aluminum work and glazing
- n) Road work

Structural design and drawings shall be issued by Architect Consultants and periodic supervision shall be by BECIL Representative.

Note: Any discrepancy/dispute regarding scope of work will be decided by the Architect Consultants i.e. M/s EDC in consultation with BECIL that shall be binding on the Contractor.

- 1.4 The joint measurements of works shall be done by the Contractor along with BECIL Representative & will be recorded in MB's by the Contractor, who will send one copy each to BECIL representative on site, & Architect Consultants i.e. M/s EDC. The Architect Consultants after receiving checked bill from BECIL representative, within 10 days, shall issue the certificate of recommended payments. In all, BECIL will take 30 days to clear the bill, after deducting security deposit @ 5% from amount of each running bills. This will be released post successful completion and rectification of defects after expiry of the defects liability period of twelve months.
- 1.5 Two sets of drawings will be issued by the Architect Consultants free of cost but subsequent copies will be issued @ Rs.300/- per drawing to the Contractor.
- 1.6 The Contractor at his own cost shall provide necessary pumps/generator; arrange electric and water supply, hoist and T&P etc for carrying out the works. Cost of any new storage built for the works, will be borne by the Contractor.
- 1.7 The following items may have to be executed but no extra payment will be made.
 - (a) Temporary chowkidar hut, site office, etc if constructed on site shall be cleared from the site on completion of the works by the contractor at his own cost.
 - (b) The layout of building shall be marked on site by the contractor for approval of BECIL Representative / Architect Consultants.
 - (c) Miscellaneous site preparation for taking up the work.

2.0 GENERAL CONDITIONS OF CONTRACT

- 2.1 The Contractor's rates shall include the cost of labour, transportation of labour, materials, T&P etc at the site and his own profit, over heads and taxes including ESI, PF, Works Contract Tax, Octroi, Service tax etc.
- 2.2 The Principals BECIL reserves the right of accepting the whole or any part of the tender and the tenderer shall be bound to perform the same at the quoted rates.
- 2.3 For interpreting the specifications or incase of any ambiguity the following order of decreasing importance shall be followed:
 - a) The price Bill of Quantities.
 - b) The additional / Technical Specifications.

- c) Drawings
- d) Conditions of Contract.
- e) Instructions from the Architect Consultants / BECIL Representative in writing.
- f) CPWD specifications, with up to date correction slips.

- 2.4** **EMD:** An earnest money deposit (EMD) of Rs 80,000/-/- will be submitted by the Tenderer by a DD /Pay order / Banker's cheque in favour of BECIL. The EMD of the successful tenderer shall be adjusted towards security deposit, whereas the EMD of the unsuccessful tenderers shall be returned within 15 days of the finalization of the tender. The EMD shall not carry any interest. After acceptance of the tender the tenderer shall sign the necessary contract papers within 7 days of the issue of acceptance letter. In case of delay the Earnest Money will be forfeited or tender cancelled.
- 2.5** The Contractor shall not be entitled to any compensation for any loss suffered by him on account of any delay in commencing or executing the work, whatsoever be the cause for such delays including delays in procuring Government Controlled or other materials.
- 2.6** Different items to be executed are for all heights, depths, curvatures and widths unless otherwise specified.
- 2.7** The detailed schedule of program in the form of PERT-chart/ bar chart/activity chart for the whole work shall be drawn in consultation with the Architect Consultants / BECIL representative, and submitted within 7 days of the Award of Work by the contractor. The work shall be progressed and monitored from week to week and completed in the stipulated time of contract and according to the approved Schedule.
- 2.8** If BECIL wants to occupy areas in part, the Contractor shall have to complete the work of these areas in consultation with Architect Consultants and hand over the same to BECIL without affecting any of the clauses of contract agreement.
- 2.9** The principals BECIL does not bind itself to accept the lowest or any other tender, and reserve to itself the authority to reject any or all tenders received without assignment of any reason. All Tenders in which any of the prescribed condition is not fulfilled or is incomplete in any respect are liable to be rejected.
- 2.10** No extension of time will be allowed to the Contractor due to weather conditions prevalent in the area. The Contractor is expected to take all the precautions at his own cost so that the work, workmanship and the materials are not affected in the inclement weather.
- 2.11** The work as described in the Contract, drawings & specification shall be completed within 3 months from the date of award of Tender.
- 2.12** **Extra items:** Rates of all extra items or additional, altered or substituted items shall be worked out as per CPWD norms and will include 15% for contractors profit including overheads. The rates for extra/substituted items shall be got approved from the BECIL Representative upon advice of the Architect Consultants before execution of the work. Any error in sanction of the rates is liable to be revised at any time by BECIL.
- 2.13** BECIL reserves the right of constructing any part of the building or any additional work

being part of the project themselves and contractor shall have no claims on the work carried out.

- 2.14** Receipts shall be provided by the contractor of any payments received for the works done as per CPWD accounting practices. No payment will be made unless contract is signed by the contractor.
- 2.15** The Main Contractor shall assist / co-operate with all other subcontractors even if employed by BECIL themselves directly during the period of contract or during extended period.
- 2.16** BECIL reserves the right to get any of the any specialized work items executed directly by Sub Contractors if deemed fit by them.
- 2.17** Electrical and water connection at site is to be arranged by the contractor at his own cost. The Contractor shall make arrangement for electrification or electricity for pumping and lighting required all around the site.
- 2.18** Ground Floor- The ground floor shall be the slab or floor immediately above the prevailing site levels determined by the Architect Consultants.
- 2.19** The Contractor shall keep the site clean of debris and other unwanted materials during construction and handover the site complete and clear of all malba or any unwanted material, labour huts or equipment of the Contractor etc.
- 2.20** Use of correctional fluid anywhere in the tender document is not permitted and such tender is liable to be rejected.
- 2.21** **Employment of Technical staff and employees:**
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 shall immediately after receiving Letter of Award of the contract and before commencement of the work, intimate in writing to the BECIL Representative details like name, address, qualification etc of the principal technical representative to be in charge of the work. Such qualification shall not be lower than specified in Schedule 'F'. BECIL Representative shall within 7 days of receipt of such communication intimate in writing his approval or otherwise of such representative to the contractor.

3.0 **PERFORMANCE GUARANTEE**

- (i) The successful tenderer shall submit an irrevocable Performance Guarantee of 5% (Five percent) of the tendered amount in addition to other deposits mentioned elsewhere in the contract for his proper performance of the contract agreement, (not withstanding and/or without prejudice to any other provisions in the contract) within period specified in Schedule 'F' from the date of issue of letter of acceptance. This period can be further extended by BECIL Representative up to a maximum period as specified in schedule 'F' on written request of the contractor stating the reason for delays in procuring the Performance Guarantee, to the satisfaction of the Architect Consultants/BECIL Representative. This guarantee shall be in the form of Cash (in case guarantee amount is less than Rs. 10,000/) or

Deposit at Call receipt of any scheduled bank/Banker's Cheque of any scheduled bank/Demand Draft of any scheduled bank/Pay Order of any scheduled bank (In case guarantee amount is less than Rs. 1,00,000/) or Government Securities or Fixed Deposit Receipts or Guarantee Bonds of any Scheduled Bank or the State Bank of India in accordance with the form annexed hereto. In case a fixed deposit receipt of any Bank is furnished by the contractor to the Government as part of the performance guarantee and the Bank is unable to make payment against the said fixed deposit receipt, the loss caused thereby shall fall on the Contractor and the contractor shall forthwith on demand furnish additional security to BECIL to make good the deficit.

- (ii) The Performance Guarantee shall be initially valid up to the stipulated date of completion plus 60 days beyond that in case the time for completion of work gets enlarged; the contractor shall get the validity of Performance Guarantee extended to cover such enlarged time for completion of work. After recording of the completion certificate for the work by the competent authority, the performance guarantee shall be returned to the contractor, without any interest.
- (iii) The Architect Consultants/BECIL Representative shall not make a claim under the performance guarantee except for amounts to which BECIL is entitled under the contract (not withstanding and/or without prejudice to any other provisions in the contract agreement) in the event of.
 - (a) Failure by the contractor to extend the validity of the Performance Guarantee as described herein above, in which event BECIL may claim the full amount of the Performance Guarantee.
 - (b) Failure by the Contractor to pay BECIL any amount due, either as agreed by the Contractor or determined under any of the Clauses/Conditions of the agreement, within 30 days of the service of notice to this effect by Architect Consultants/BECIL Representative.
- (iv) In the event of the Contract being determined or rescinded under provision of any of the Clause/Condition of the agreement, the performance guarantee shall stand forfeited in full and shall be absolutely at the disposal of the BECIL.

4.0 SECURITY DEPOSIT

- 4.1** The Contractor whose Tender is accepted will be required to furnish by way of Security Deposit for the fulfillment of his Contract a sum of money to be @ 5% of the tendered costs to be adjusted from the running bills, the maximum total sum shall be Rs. 5.0 Lacs.
- 4.2** Security deposit, Performance Guarantee and Earnest Money will not carry any interest during the period.
- 4.3** Security deposit shall be refunded on expiry of Defects Liability Period of one year on successful completion and rectification of defects to the satisfaction of BECIL/Architect Consultants.

- 4.4 Any defect developed within Defect Liability Period from the date of completion will have to be rectified by the Contractor at his own cost.
- 4.5 The said Security deposit shall indemnify BECIL against loss from defects arising under any clause of this contract or due to the failure of the Contractor to carry out promptly any repairs, correction or instructions under the Contract

5.0 PROVISIONS FOR LABOUR

- 5.1 Payments to labour shall be as per law & shall be paid to the satisfaction of BECIL. Photocopy of the receipts is to be submitted by the contractor on demand. No labour complaint shall be entertained by BECIL. However in the event of nonpayment to the labour by the contractor BECIL reserves the right to deduct the payment involved from the running bills of the contractor & pay to the complainant labour.
- 5.2 The contractor shall comply with all the provisions of the Minimum Wages Act, 1948, and Contract Labour (Regulation) Act, 1970, amended from time to time and rules framed there under and other labour laws effecting.
- 5.3 Medical facilities (as per law) for workers will be provided by the Contractors at their cost including insurance for the workers engaged for the execution of works
- 5.4 **Protections of health and sanitary arrangement for workers**
Model Rules for the protection and care of health and sanitary arrangement for workers\ employed by CPWD or its contractors as per CPWD applicable norms.

5.5 Safety code

All precautions and safety measures shall be adopted as per CPWD safety code applicable for all GOVT works.

6.0 SECURITY OF MATERIALS

Safe custody of Material, supplied to the Contractors or material purchased by him for the works is the responsibility of the Contractor, including its watch and ward.

SPECIAL CLAUSES OF CONTRACT

7.0 DEFINITIONS

BROADCAST ENGINEERING CONSULTANTS
INDIA LIMITED.

C – 56 / A -17 Sector -62
Noida -201307 (UP)

The Principles

THE CONTRACTOR-

THE ARCHITECT CONSULTANT'S - M/s Environment Design Consultants
A-194, Gujranwala Town, Part-1, Delhi-110033

- 7.1** Any of those mentioned above as such in the agreement shall include their legal representative's assignees or successors and are treated through out the contract document as if each were of singular number and masculine gender.
- 7.2** "The **Site**" shall mean the site of the contract work, i.e. construction of new CTI building (PORTA CABIN TYPE) located at AIR **Jhansi** (UP) on behalf of Private Broadcasters for FM PHASE - III (BATCH – 1), including any building, and erection there on, and any other land allotted by the Principles for Contractor to use.
- 7.3** The work shall not be sub let by the contractor without permission of BECIL. The term "**Sub-Contractor**" as employed herein, includes those having a direct contract with the Contractor includes one who furnishes material worked to a special design according to the plans or specification of the work but does not include one who merely furnished material not so worked. Anyone doing work on a piece rate basis shall be deemed a sub-Contractor.
- 7.4.** The work to be executed is construction of a new building to accommodate radio transmission services along with external development like access paths, boundary walls etc. The working hours for the civil works will have to be coordinated with BECIL representative to ensure minimal inconvenience.
- 7.5** Written notice shall be deemed to have been duly served if delivered in person to the individual or to a member of the firm or if delivered at or sent by registered mail to the last business address available to BECIL.
- 7.6** The term "work" of the Contractor includes execution of the work.

7.7 All time limits stated in the Contract Document are the essence of the Contract.

7.8 The law of the place of the work shall govern the construction under this Contract.

8.0 **ARTICLE OF AGREEMENT**

The following documents shall constitute the contract documents.

- a) Preface & Scope of work
- b) General Condition of Contract
- c) Clauses of Contract
- d) Bill of Quantities
- e) C.P.W.D. specifications with up to date correction slips.
- f) Drawings issued by Architect/ BECIL from time to time.
- g) Schedule – F & Appendix-1.

8.1 The several documents forming the contract are to be taken as mutually explanatory of one another, detailed drawings being followed in preference to small scale drawing and figured dimensions in preference to scale and special conditions in preference to General Conditions. If there are varying or conflicting provisions made in any one document forming part of the contract, BECIL shall be the deciding authority with regard to the intention of the document and BECIL's decision shall be final and binding on the contractor.

8.2 The Contractor shall keep one copy of the CPWD specifications, with descriptive schedule or other like document referred to in this document and one copy of the Contract Drawings and such other drawings, supplied to him from time to time so as to be available to the principles or the Architect Consultants or his representative at all reasonable times.

8.3 Upon final payment under the clauses of the contract, the Contractor shall if requested by the Architect Consultants forthwith return to the Architect Consultants all drawings, details, specifications and other document of like nature which bears his name or that of the Architect Consultants.

8.4 Any other clauses or conditions not covered by this Agreement shall be governed by the CPWD manuals & form part of the Agreement. Mode of measurement shall be as per CPWD norms.

9.0 **TYPE OF CONTRACT**

The Contract shall be an Item Rate Contract.

10.0 **CONTRACT DRAWINGS**

10.1 Architect Consultants shall issue the basic drawings as & when required. Claim for delay in getting these drawings will not be accepted. Completion of work is considered a joint responsibility. A request for preparing required/additional drawings shall be sent to the Architect Consultants for any basic drawing 7 days in advance.

10.2 In general the drawings supplied by BECIL Representative/Architect Consultants shall indicate the dimension, position and type of construction. Any additional drawings like

working details, structural details etc shall be issued by the Architect Consultants after approval from BECIL.

- 10.3** The Contractor's work shall not deviate from the drawings and specifications. The Architect Consultants interpretation of these document shall be final and without appeal.
- 10.4** Error, inconsistencies discovered in the drawings and specifications shall be promptly brought to the attention of the Architect Consultants, through the BECIL Representative on site for interpretation or correction. Local conditions, which may affect the work, shall likewise be brought to the notice of Architect Consultants/BECIL representative. Attention: If at any time, it is discovered that work is being done which is not in accordance with the Contract drawings and specifications, the Contractor shall correct the work immediately. Rectification of defective work shall not be the basis for any claim for extension of time of completion. The Contractor shall not carry on such work except with the knowledge of the Architect Consultants or BECIL representative.
- 10.5** Figured dimensions on the scale drawing and large size details shall govern construction. These drawings shall take precedence over small-scale drawings. Any work done before receipt of such details and not in accordance with the same, shall as directed, be removed and replaced or adjusted by the Contractor without expense to BECIL. The general conditions apply with equal force to all the works including authorized extra work and work executed by the sub-contractor.
- 10.6** All the drawings and specifications and copies thereof, furnished by the Architect Consultants are their property. They shall not be used on any other work and shall be returned to the Architect Consultants at their request on Completion of the Contract.

11.0 CONTRACT SUM

- 11.1** If a discrepancy is found, the rates which correspond with the amount worked out by the contractor shall unless otherwise proved be taken as correct. If the amount of an item is not worked out by the contractor or it does not correspond with rates written either in figures or in words, then the rates quoted by the contractor in words shall be taken as correct. Where the rates quoted by the contractor in figures and in words tally but the amount is not worked out correctly, the rates quoted by the contractor will unless otherwise proved be taken as correct and not the amount. In event no rate has been quoted for any item(s), leaving space both in figures (s), words (s) and amount blank, it will be presumed that the contractor has included the cost of this/these item (s) in other items and rate for such items(s) will be considered as zero and work will be required to be executed accordingly.
- 11.2** Any error in description or omission of items from the contract bills shall not vitiate this contract but shall be corrected and deemed to be a variation required by BECIL.

12.0 SCOPE AND EXTENT

- 12.1 SCOPE:-** The general character and scope of the work is illustrated and defined by specification and by the signed Drawings. If the Contractor shall find any discrepancy in or divergence between the contract drawings and or the Contract bill shall immediately give to

the Architect Consultants a written notice specifying the discrepancy or divergence and the Architect Consultants shall issue instruction in regard there to.

12.2 **EXTENT:** - The Contractor shall carry out and complete the work in every aspect in accordance with the Contract and with the direction of and to the reasonable satisfaction of the Architect Consultants and the Principles BECIL. The Architect Consultants, from time to time, may issue further drawings, and which are collectively referred to as Architect Consultants instructions. All such drawings and instruction shall be consistent with the Contract document, true development thereof, and reasonable inferable there from.

12.3 The Contractor shall not without the written consent of BECIL, assign this contract or sublet any portion of the work failing which BECIL may serve a notice in writing rescinding the Contract where upon the security deposit may be forfeited.

13.0 **ARCHITECT CONSULTANTS/BECIL REPRESENTATIVE INSTRUCTIONS**

13.1 If within the seven days after receipt of written notice from the BECIL Representative/Architect Consultants to the Contractor, required compliance to rectify, reconstruct or replace any defective work or that the work is being performed in an inefficient or otherwise improper or unwork manlike manner shall omit to comply, then BECIL may employ and pay other person to execute any work what so ever at the Contractors risk, cost and earnest money, security deposit and performance guarantee are liable to be forfeited and shall be absolutely at deposable of BECIL

13.2 All instruction issued by the BECIL Representative shall be in writing. Any instruction issued orally shall be of immediate effect but shall be confirmed in writing by the Contractor within seven days and if not dissented by the, BECIL Representative the Contractors confirmation .shall take effect as from the expiry of the said period of seven days.

14.0 **FACILITIES AND COOPERATION**

In case of the work indicated on the drawing but not included in the bill of quantities, the Contractor shall provide necessary facilities and cooperation for execution such work including all cutting filling or patching of his work that may be required or execute such work so as to receive the work of other contractor shown upon or reasonably implied by the drawings and specification for the completed structure, and he shall make good. The Architect Consultants/ BECIL Representative may direct, any cost caused by the defective or ill- timed work to be borne by the party responsible thereof.

15.0 **SETTING OUT**

The Architect Consultants/ BECIL Representative, after consulting the Architect Consultants shall determine any lines and levels which may be required for the execution of the work and shall furnish to the Contractor by way of accurately dimensioned drawing such information shall enable the Contractor to set out the work at ground level. The Contractor shall set out the level of work and shall be responsible for the accuracy of the same. No payment shall be made for such layout at any level.

16.0 SITE VISIT

Before tendering, the Contractor shall be deemed to have examined the Site and satisfied himself as to the nature of the existing road or other means of communication and site constraints if any.

17.0 POSSESSION

The Contractor shall be allowed admittance to the site 7 days before the date of Commencement stated in the letter and shall regularly proceed with and complete the same on or before the date of completion stated in the schedule F, nevertheless to the provision for the extension of time granted as per provisions of contract.

17.1 TREASURES:

Any Treasures, coins, objects of antiquity, which may be found at the site shall be handed over to the principals.

18.0 SAMPLES

18.1 BECIL representative shall check in consultation with the Architect Consultants, approve samples, with reasonable promptness for being in conformity with the design concept of the project and for being in confirmation in the contract document. The work shall be carried out in accordance with the approved samples and shop drawings given by the Architect Consultants.

18.2 Random samples of concrete shall be taken from the site as per normal Civil Engineering practice and tested in a lab approved by the Architect Consultants. Necessary equipment shall be provided by the contractor and such charges for the test shall be borne by the contractor.

19.0 PROGRESS CHART

The Contractor shall prepare PERT chart/ Activity chart and submit the same for approval of BECIL/Architect Consultants. He should also submit weekly progress report to BECIL to ensure conformity with pert chart / activity chart.

20.0 ACCESS TO THE WORK

The Architect Consultants and his representatives and the Principles BECIL and their representatives shall at all reasonable time have access to the works and to the workshops or other places where work or fabrication is being prepared for the Contract.

21.0 BECIL STATUS AND DECISIONS

21.1 The term BECIL Representative means the person appointed or nominated by BECIL who shall supervise and be in charge of the work at site. The work shall be subject to the guidance of the Architect Consultants and under control and direction of the Principles BECIL.

- 21.2** M/s Environment Design Consultant shall be the representative of BECIL during the construction period. Their representative shall periodically visit the site; familiarize himself generally with the progress and the quality of the work to determine in general if the work is proceeding in accordance with contract document.
- 21.3** The contractor shall, on receipt of the order in writing of the Architect Consultants /BECIL Representative (whose decision is final and binding on the contractor) suspend the progress of the works or any part thereof for such time and in such manner as the Architect Consultants /BECIL Representative may consider necessary so as not to cause any damage or injury to the work already done 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 secure the works to the extent necessary and carry out instructions given in that on behalf of the Architect Consultants /BECIL Representative
- 21.4** Decisions: The Architect Consultants shall within a reasonable time give decision on all claims of the Contractor and all other matters relating to the execution and progress of the work. The Architect Consultants may in consultation with the principles i.e. BECIL so desire to find it necessary, and from time to time issue further drawings, details and/ or written instructions, written directions and written explanation.
- 21.5** Dismissal: The contractor shall on the written instruction of the Architect Consultants / Principle BECIL immediately dismiss from the work any person employed thereon by him who may be in the opinion of the Architect Consultants and/ or the Principles be incompetent. The same Person may not be employed on the work without the permission of the BECIL Representative or the Principles as the case may be.

22.0 CONTRACTORS FIELD ORGANISATION AND EQUIPMENT

Equipment: The Contractor shall provide and install all necessary hoists, ladders, Scaffolding, tools, plants, motors, pumps, all transport for labour and plant necessary for the proper carrying out execution and completion of the work to the satisfaction of the BECIL Representative/Principles.

23.0 DEVIATIONS/VARIATIONS EXTENT AND PRICING

- 23.1** In exceptional cases, the Architect Consultants shall have power to make alteration in, omission from, addition to, or substitution for the original specification , drawings, designs and instruction that may appear to him to be necessary or advisable during the progress of the work, and to omit a part of the works in case of non-availability of a portion of the site or for any other reasons and contractor shall be bound to carry out the works in accordance with any instructions given to him in writing signed by the Architect Consultants and such alterations, omission, additions or substitutions shall form part of the contract as if originally

provided therein and any altered, additional or substituted work which the contractor may be directed to do in the manner specified above as the part the works, shall be carried out by the contractor on the same condition in all respects including price on which he agreed to do the main work except as hereafter provided.

- 23.2** The time of completion of the work shall, in the event of deviation resulting, additional cost over the tender value sum being ordered, be extended, if requested by the contractor, as follows:

In the proportion which the additional cost of the altered additional or substituted work, bears to the original tender value plus.

23.3 DEVIATION EXTRA ITEMS AND PRICING

In the case of extra item(s) the contractor may within fifteen days of receipt of the work order and or occurrence of the item(s) claim rates, supported by the proper analysis, for the work and the Architect Consultants /BECIL Representative shall within 15 days of the receipt of the claim supported by analysis after giving consideration to the analysis of the rates submitted by the contractor, determine the rate on the basis of the market rates and the contractor shall be paid in accordance with the rates so determined.

23.4 DEVIATION, SUBSTITUTED ITEM PRICING

In 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 rate of substituted item and 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 shall be the rate for the agreement item (to be substituted) so decreased to the extent of the difference between the market rate of substituted item and agreement item (to be substituted).

24.0 DEVIATION, DEVIATED QUANTITIES, PRICING

- 24.1** In the case of contract item, substituted item, contract cum substituted item, which exceeds the limits of quantities as given in schedule 'F' the contractor may within fifteen days of receipt of order or occurrence of the excess, claim revision of the rate, supported by proper analysis, the work in excess of the above mentioned limits, provided that if the rates so claimed are in are in the excess of the rate specified in the schedule of quantities the Architect Consultants /BECIL Representative shall within 15 days of receipt of the claims

supported by analysis, after giving consideration to the analysis of the rate submitted by the contractor, determine the rate on the basis of market rates and the contractor shall be paid in accordance with rates so determined.

- 24.2** 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 F”, and the Architect Consultants /BECIL Representative shall after giving notice to the contractor within 10 days of occurrence of the excess and after taking into consideration any reply received from him within fifteen days of the receipt of the notice, revise the rates for the work in question within 15 days of the expiry of the said period of fifteen days having regard to the market rates.
- 24.3** The contractor shall send to the Architect Consultants /BECIL Representative once every 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 Architect Consultants /BECIL Representative which he has executed during the preceding period failing which the contractor shall be deemed to have waived his right. However, the CMD BECIL may authorize consideration of such claims on merits.
- 24.4** Any operation incidental to or necessarily has to be in contemplation of tender while filling 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 the rates quoted by the Tenderer or the rate given in the said schedule of tendered rates, as the case may be. Nothing extra shall be admissible for such operation.

25.0 WHEN CONTRACT CAN BE DETERMINED

- 25.1** Subject to other provisions contained in the clause, the Architect Consultants /BECIL Representative may, without prejudice to his any other rights or remedy against the contractor in respect of any delay, inferior workmanship, any claims for damages and/or any other provision of this Otherwise, and whether the date of completion has or has not elapsed, by notice in writing absolutely determine the contract in any of the following cases:
- (a) If the contractor, having been given by the Architect Consultants /BECIL Representative notice in writing to rectify, reconstruct or replace any defective work or that the work is being performed in an inefficient or otherwise improper or un workmanlike manner shall omit to comply with the requirement of such notice for a period of seven days thereafter.
 - (b) If the contractor has, without reasonable cause, suspended the progress of the work or has failed to proceed with the work with due diligence so that in the opinion of the Architect Consultants /BECIL Representative (which shall be final and binding) he will be unable to secure completion of the work by the date for completion and continues to do so after a notice in writing of seven days from the Architect Consultants /BECIL Representative.

- (c) If the contractor fails to complete the work within the stipulated date or items of work with individual date of completion, if any stipulated, on or before such date(s) of completion and does not complete them within the period specified in a notice given in writing in that behalf by the Architect Consultants /BECIL Representative.
- (d) If the contractor persistently neglects to carry out his obligations under the Contract and/ or commits default in complying with any of the terms and condition of the Contract and does not remedy it or take effective steps to remedy it within 7days after a notice in writing is given to him in that behalf by the Architect Consultants /BECIL Representative.
- (e) If the contractor shall offer or given or agree to give to any person in BECIL service or to any other person on his behalf any gift or consideration of any kind as an inducement or reward for doing or forbearing to do or for having done or forborne to do any act in relation to the obtaining or execution of this or any other contract for BECIL.
- (f) If the contractor shall enter into a contract with BECIL in connection with which commission has been paid or agreed to be paid by him or to his knowledge, unless the particulars of any such commission and the terms of payment thereof, have been previously disclosed in writing to the Architect Consultants /BECIL Representative.
- (g) If the contractor shall obtain a contract with BECIL as a result of wrong tendering or other non bonafide methods of competitive tendering.
- (h) If the contractor being an individual, or if a firm, insolvent or have a receiving order or for administration of his estate made against him or shall take any proceedings for liquidation for composition (other than a voluntary liquidation for the purpose of amalgamation or reconstruction)under any insolvency Act for the time being in force or make any conveyance or assignment of his effects or composition or arrangement for the benefit of his creditors or purport so to do, or if any application be made under any insolvency Act for the time being in force to make any conveyance or assignment of his effects or composition or arrangement for the benefit of his creditors or purport so to do, or if any application be made under any insolvency Act for the time being force for the sequestration of his estate or if a trust deed be executed by him for benefit of his creditors .
- (i) If the contractor being a company shall pass a resolution or a court shall make an order that the company shall be wound up or if a receiver or a manager or behalf of a creditor shall be appointed or if circumstances shall arise which entitle the court or the creditor to appoint a receiver or a manager or which entitle the court to make a winding up order.
- (j) If the contractor shall suffer an execution being levied on his goods and allow it to be continued for a period of 21 days.
- (k) If the contractor assigns, transfers, sublets (engagement of labour on a piece-work basis or of labour with materials not to be incorporated in the work, shall not be deemed to be subletting) or otherwise parts with or attempts to assign, transfer sublet or otherwise parts with the entire works or any portion thereof, without the prior written approval of the Architect Consultants /BECIL Representative.

- (l) If the work is not started by the contractor within 7 days of the award of work. When the contractor has made himself liable for action under any of the cases aforesaid, the Architect Consultants /BECIL Representative shall have powers:
 - (a) To determine the Contract as aforesaid (of which termination notice in writing to the contractor under the hand of the Architect Consultants /BECIL Representative shall be conclusive evidence). Upon such determine, the Earnest Money Deposit, Security Deposit already recovered and Performance Guarantee under the Contract shall be liable to be forfeited and shall be absolutely at the disposal of BECIL.
 - (b) 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 un-executed out of his hands and give it to another contractor to complete the work. The contractor, whose contract is determined as above, shall not be allowed to participate in the tendering process for the balance work.
 - (c) In the event of above courses being adopted by the Architect Consultants /BECIL Representative, 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 advances on account or with a view to the execution of the work or the performance of the contract. And in case action is taken under any of the provision aforesaid, the Contractor shall not be entitled to recover or be paid any sum for any work thereof or actually performed under this contract unless and until the BECIL Representative has certified in writing the performance of such work and the value payable in respect thereof, and he shall only be entitled to be paid the value so certified.
 - (d) In case, the work cannot be started due to reasons not within the control of the Contractor within 7 days of the award of work, either party may close the Contract. In such eventuality the Earnest Money Deposit and the Performance Guarantee of the contractor shall be refunded, but no payment on account of interest, loss of profit or damages etc. shall be payable at all.

26.0 CONTRACTOR LIABLE TO PAY COMPENSATION EVEN IF ACTION NOT TAKEN UNDER CLAUSE - 25

- 26.1 In any case in which any of the powers conferred upon the BECIL Representative by the clause-25 thereof, shall have become exercisable and the same are not exercised, the non exercise thereof shall not constitute a waiver of any of the conditions hereof and such powers shall notwithstanding be exercisable in the event of any future case of default by contractor and the liability of the Contractor for compensation shall remain unaffected. In the event of the BECIL Representative putting in force all or any of the powers vested in him under the preceding clause he may, if he so desires after giving a notice in writing to the Contractor, take possession of (or at the sole discretion of the BECIL Representative which shall be final and binding on the contractor) use as on hire (the amount of the hire money being also in the final determination of the Representative) or any tools, plant, materials, stores, in or upon the works, or the site thereof, belonging to the Contractor, or procured by the Contractor and intended to be used for the execution of the work / or any part thereof, paying or allowing for the same in account at the contract rates, or in the case

of these not being applicable, at current market rates to be certified by the BECIL Representative, whose certificate thereof, shall be final and binding on the Contractor, clerk of the works, foreman or other authorized agent to remove such tools, plant, materials or stores from the premises (with in a time to be specified in such notice) In the event of the Contractor failing to comply with any such requisitions, the BECIL Representative may remove them at the contractors expense or sell them by auction or private sale on account of the Contractor and his risk in all respect and the certificate of the BECIL Representative as to the expense of any such removal and the amount of the proceeds and expenses of any such sale shall be final and conclusive against the contractor.

27.0 CONTRACTORS COOPERATION WITH OTHER CONTRACTORS.

27.1 The contractor shall help & co-operate in work & installation the other contractors working on other Part / parts of the building under separate Contract to align & keep appropriate levels, services, Water supply, & electrical etc. The contractor shall jointly undertake testing of such services / work required for successful completion of work to the satisfaction of the BECIL representative.

28.0 MEASUREMENT OF WORK DONE /CERTIFICATES AND PAYMENTS

28.1 Contractor's site in charge shall, except or otherwise provide, ascertain and determine by measurement the value in accordance with the contract of the work done. All measurement of 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.

28.2 At the period of interim certificate named in the Schedule F to this condition the BECIL Representative shall issue a certificate stating the amount due to the Contractor from the Principles and after concurrence by the Architect Consultants, the Contractor will be entitled to payment thereof, within the period for honoring certificate. Interim valuations shall be made whenever the BECIL Representative considers it to be necessary. Generally, the certificate shall be issued when the Contractor executes the net work costing Rs 7.5 lacs or equivalent or more.

28.3 The amount stated as due in an interim certificate shall be total value of the work properly executed and of the materials and goods delivered to or adjacent to the work for use thereon up to and including a date not less than seven days before the said certificate, less any amount which may be retained by the Principles and less any installment previously paid under this condition.

28.4 The principal shall retain 5% of the total value of the work done as security deposit, and be subject to the conditions agreed upon in respect thereof in the contract documents.

28.5 The Contractor shall be entitled to the payment of the final balance in accordance with the final certificate. This shall be issued in writing by the Architect Consultants /BECIL Representative at the expiry of the period referred to as the Defects Liability Period of twelve months from the date of completion or as soon as after the expiry and all defects made good according to the true intent and meaning here of which ever shall last happen. No further claims shall be made by the Contractor and these shall be deemed to have been waived and extinguished.

28.6 The measurement and valuation of the work shall be completed within the period of final Valuation and measurement stated in the appendix to these conditions. The Contractor shall be supplied with the copy of the priced bill of valuation not later than the end of the said period and before the issue of final certificate.

29.0 ADVANCES

Generally no advances shall be paid. However upon furnishing such request by the Contractor through BECIL Representative, secured advance up to 50% of the cost of raw materials may be made to the contractor for non-perishable, non fragile and noncombustible and are in accordance with the contract and which has been brought on the site in connection therewith, and are adequately stored goods but which may have not at the time of advance been incorporated in the works.

When materials on account of which an advance has been made under this sub-clause are incorporated in the work, the amount of such advance shall be recovered / deducted from the next payment made under any of the clause or clauses of this contract.

30.0 CLAIMS FOR EXTRAS

When any instruction or decision given involves an extra amount or whereby the Contractor may plan to claim an extra amount it shall be the responsibility of the Contractor to inform the principles of the extra amount and get written authorization from the principles before proceeding with the work involved. The rates for such extra work or extra items shall be determined in accordance with the C.P.W.D system of Analysis of Rates and shall not be derived from agreed rates in this contract. The Architect Consultants decision regarding rates shall be final.

31.0 DEDUCTION FOR UNCORRECTED WORK

If the Architect Consultants deems it inexpedient to correct work damage or not done in accordance with the contract an equitable deduction from the contract price shall be made by the principles there of on the basis which is applicable for extra work/items as worked out by the Architect Consultants.

32.0 FLUCTUATIONS

The Contractor shall not claim any extra for fluctuation of price and the contract price shall not be subject to any rise for prices except as provided for especially in any clause in the Contract Document.

33.0 VARIATIONS

On signing upon the contract by both the parties, during execution the quantities may vary up to 50% of the superstructure quantities & 100% for the items below the plinth level, based on drawings.

34.0 INSPECTION TESTING AND RECTIFICATION OF DEFECTIVE WORK

As and when required by the principles or the BECIL Representative upon the advice of Architect Consultants, Contractor shall organize inspection of works at his cost to prove their soundness and efficiency. If after tests any work or portions of work are considered defective or unsound by the Principles or the BECIL Representative /Architect Consultants, the Contractor shall remove the defective work from the site, or pull down and re-execute the works at his own cost to the satisfaction of Architect Consultants /BECIL Representative and the Principles. The Contractor shall furnish promptly, without additional charges, all reasonable facilities and labour necessary for the safe and convenient inspection and test that may be required by the Architect Consultants or Principles.

35.0 POSSESSION, COMPLETION, AND POSTPONMENT

- 35.1** On the date of commencement stated in the appendix to these conditions possession of the site shall be given to the Contractor who shall, there upon, begin the work regularly and diligently proceed with the same and he shall complete the same on or before the stipulated date for or in accordance with provisions of extension of time contained in the conditions.
- 35.2** BECIL Representative may issue instructions in regard to the postponement of any work to be executed under the provisions of this contract. BECIL reserves the right of constructing any part of the building themselves.

36.0 EXTENSION

Upon it becoming reasonably apparent that the progress of the work is delayed, the Contractor shall forthwith, give written notice of the cause of the delay to the Principles that the completion of the work is likely to be or has been delayed beyond any extended time previously fixed under the clauses. The Architect Consultants may recommend extension of time to principles for such period for which delay occurred for reasons beyond the control of Contractors.

37.0 TERMINATION / FORECLOSURE OF CONTRACT

- 37.1** After the due process of the CPWD and incase in the opinion of BECIL, any of the clauses are violated by the Contractor. The contract can be determined by BECIL and work executed at the risk and cost of Contractor.
- 37.2** In the event of the contract being determined or rescinded (of which termination or rescission notice in writing to the contractor under the hand of the BECIL Representative shall be conclusive evidence). Upon such determination or rescission, the Earnest Money Deposit, Security Deposit already recovered and Performance Guarantee under the contact shall be liable to be forfeited and shall be absolutely at the disposal of BECIL.
- 37.3** Foreclosure of Contract: At any time after acceptance of the tender, BECIL shall decide to abandon or reduce the scope of works for any reason whatsoever and hence not require the whole or any part of the works to be carried out, The BECIL Representative after consulting Architect Consultants gives a notice in writing to that effect to the Contractor and the Contractor shall act accordingly in the matter. The Contractor shall have no claim to any payment of compensation or otherwise whatsoever, on account of any profit or advantage

which he might have derived from the execution of the works in full but which he did not derive in consequence of the foreclosure of the whole or part of the works.

The contractor shall, if required by BECIL Representative furnish to him books of account, wage books, time sheets and other relevant documents and evidence as may be necessary to enable him to certify any reasonable amount payable.

38.0 ARBITRATION AND JURISDICTION

In case of any dispute, the principles shall appoint in consultation and agreement with the Contractor and Architect Consultants a Civil Engineer/ Architect of repute in Delhi (India) as Arbitrator whose decision shall be final and binding on both the parties i.e. the principal and the Contractors.

However, the jurisdiction of the Delhi High Court shall be accepted by both parties incase reference of dispute is made to a court.

39.0 WORKMANSHIP

All workmanship shall be of best trade practices and Contractor shall immediately remove from the work the workmanship which in the opinion of the Principals or their representative are defective or unsuitable and shall substitute proper workmanship at his own cost.

N.B : In case any situation or dispute is not covered by any of the clauses stated above & General Conditions of Contract in this contract document provisions of clauses contained on form 8 of CPWD shall be applied.

SCHEDULE 'F'

Reference to General Conditions of contract:

Name of work: Construction of new CTI building (PORTA CABIN TYPE) located at AIR **Jhansi** (UP) on behalf of Private Broadcasters for FM PHASE - III (BATCH – 1).

- 1 (i) Earnest money: 2% of estimated cost
- (ii) Performance Guarantee: 5% of tendered value
- (iii) Security Deposit: 5% of tendered value deductions from all interim bills
- Officer inviting tender: CMD BECIL (NOIDA)

Maximum percentage for quantity of items of work to be executed beyond which rates are to be determined in accordance with clause 24 :

100% for items of work in foundations 50% for work items of work in superstructure
100 % for items of Electrical Works

2. Definitions:

- 2(a) BECIL Representative: Representative of BECIL (Nominated by CMD of BECIL)
- 2(b) Contractor site in charge Contractor site manager responsible for the construction activity at site.

2(c) Accepting AuthorityCMD BECIL

2 (d) Percentage on cost of material & labour to cover all overheads and profits15%

2 (e) Standard Schedule of Rates: CPWD Scheduled of RateDSR 2014

2 (f) Department:BECIL

3. Time allowed for submission of performance guarantee from the date of issue of letter of acceptance , in days.....07 days

4 Authority for fixing compensation:CMD BECIL

Submitted by (Tenderer)

For BECIL.

5. Number of days from the date of issue of letter of acceptance for reckoning date of start --- 07 days
6. Time allowed for the execution of work --- 03 Months
7. Defects Liability Period --- 12 Months
8. Period of final Measurement --- 01 Month
9. Agreed liquidated damageRs 5,000.00 per day to max of 10 % of the contract value (Penalty for delay)
10. Limit of Retention fund.....5 % performance guarantee + (Plus) Security deposit of 5% of Tendered value
11. Period of honoring certificate --- 30 days.
12. Authority to give fair and reasonable extension of time for completion of work --- CMD BECIL
13. 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. 7.50 Lakhs
14. Specifications to be followed for execution of work: C.P.W.D specifications (Vol. - I to Vol – VI along with up to date Correction slips.)
15. Nearest material for which all India whole sale price index is to be followed:
TMT steel – mild steel
Cement (OPC) – PPC cement .
16. Competent Authority for deciding reduced rates --- CMD BECIL
17. List of mandatory machinery, tools & plants to be deployed by the contractor at site.
- i. C.Conc. Mixer
 - ii. Vibrator
 - iii. Welding Machine
 - iv. Pump Sets

18. Requirement of Technical Representative (s) and recovery Rate

S.no.	Minimum Qualification of Technical Representative	Discipline	Description Principal Technical/ Technical Representative	Minimum Experience	Number	Rate at Which recovery shall be made from the contractor in the event of not fulfilling provision
1.	Diploma in Engineering	Civil Engg.	Site Engineer	3Yrs.	1	Rs.15,000.00 P.M.

CONSTRUCTION OF NEW CTI BUILDING (PORTA CABIN TYPE)
LOCATED AT AIR JHANSI (UP) ON BEHALF OF PRIVATE
BROADCASTERS FOR FM PHASE - III (BATCH – 1)

1. All works shall be carried in accordance with the CPWD specifications updated with correction slips
2. All reinforcement steel shall be T.M.T and structural steel used shall be as per relevant ISI standards and as specified by the Architect Consultants.
3. The work shall be carried out in accordance with the relevant codes.
4. Cement used shall be as per ISI standards and of category 43 grade ordinary Portland cement unless specified otherwise.
5. Random concrete samples shall be got tested by the Contractor from a reputed lab and results submitted to the BECIL Representative / Principals for their appraisal and approval at the contractor cost.
6. All ingredients of a batch of cement concrete used shall be got approved from the Representative of BECIL Random samples shall be got tested from a reputed lab approved by Architect Consultants.
7. All shuttering used in the beams, slabs or columns shall be steel or waterproof plywood.
8. Puff panels used will be 50mm thick insulated sandwich panels for roof as specified in the BOQ.
9. The puff panel will have following 'U' values
50mm thick panels - $U = 0.43w/m^2 \text{ deg. C}$
10. All electrical cables fittings shall be ISI marked and ISI standards.
11. All work shall be executed to relevant electrical codes.
12. Cables used shall be of one of the following makes :
 - a) RR Cables
 - b) Finolex
 - c) Havells
13. Sanitary ware shall be of one of the following makes :
 - a) Cera
 - b) Hindware
 - c) Parryware

14. All tile work for floor & walls shall be one of the following makes:
 - a) Kajaria
 - b) Nitco
 - c) Johnson

- 15 Gyp boards shall be one of the following makes:
 - a) Gypsum India
 - b) Lafarge
 - c) Gyproc (SAINT-GOBAIN)
 - d) India Gypsum

B O Q

FOR

**CONSTRUCTION OF NEW CTI BUILDING (PORTA CABIN TYPE)
LOCATED AT AIR JHANSI (UP) ON BEHALF OF PRIVATE
BROADCASTERS FOR FM PHASE - III (BATCH – 1)**

**NOTE - QUOTED RATES OF ALL ITEMS SHALL BE
INCLUSIVE OF ALL TAXES**

BOQ for Construction of new CTI building (PORTA CABIN TYPE) located at AIR Jhansi (UP) on behalf of Private Broadcasters for FM PHASE - III (BATCH – 1).....Civil works

S.N	Description	Unit	Qty	Rate	Amount
1	<u>SITE CLEARENCE</u>				
1.1	Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth up to 30cm measured at a height of 1m above ground level and removal of rubbish up to a distance of 50m outside the periphery of the area cleared.	100 sq.mt	4.50		
2	<u>EARTH WORK</u>				
2.1	Earth work in surface excavation not exceeding 30 cm in depth but exceeding 1.5 m in width as well as 10 sqm on plan including disposal of excavated earth up to 50 m and lift up to 1.5 m, disposed soil to be leveled and neatly dressed. All kinds of soil	100 sq.mt	1.00		
2.2	Earth work in excavation by mechanical means, (Hydraulic excavator) /manual means over areas (exceeding 30 cm in depth. 1.5 m in width as well as 10 sqm on plan) including disposal of excavated earth, lead up to 50m and lift up to 1.5m, disposed earth to be leveled and neatly dressed. All kinds of soil.	cmt	80.00		
2.3	Filling with earth brought from outside (excluding rock) in plinth/trenches in layers (each layer should not exceed 15 cm), with intermediate layer of compacted earth (Soil density of 98%) after every four layers of / ramming and watering, all complete as per drawing and direction of BECIL representative.	cmt	25.00		
2.4	Laying, spreading and compacting of 63mm to 45mm size stone aggregate to form 150 mm thick hard core and preparing surface complete.	cmt	21.00		
2.5	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.				
(a)	All kinds of soil.	cmt	70.00		
2.6	Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth up to 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m. All kinds of soil:				
(a)	Pipes, cables etc. exceeding 100 mm dia but not exceeding 300 mm	rmt.	5.00		

2.7	Surface dressing of the ground including removing vegetation and inequalities not exceeding 15 cm deep and disposal of rubbish, lead upto 50 m and lift up to 1.5 m.				
(a)	All kinds of soil	100 sq.mt	1.00		
3	<u>CONCRETE WORK</u>				
3.1	Providing and laying in position cement concrete of specified grade as per drawing excluding the cost of centering & shuttering. All work up to plinth level.				
(a)	1:1½:3 (1 Cement: 1½ coarse sand: 3 graded stone aggregate 20 mm nominal size)	cmt	1.50		
(b)	1:4:8(1 Cement: 4 coarse sand: 8 graded stone aggregate 40 mm nominal size)	cmt	12.00		
(c)	1:3:6 (1 Cement: 3 coarse sand: 6 graded stone aggregate 20 mm nominal size)	cmt	15.00		
3.2	Providing and laying in position cement concrete of specified grade as per drawing excluding the cost of centering & shuttering, All work above plinth level.				
(a)	1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size)	cmt	2.00		
(b)	1:1½:3 (1 Cement: 1½ coarse sand: 3 graded stone aggregate 20 mm nominal size)	cmt	2.00		
4	<u>FORM WORK</u>				
4.1	Centering and shuttering including strutting propping etc. and removal of form work of up to plinth				
(a)	Foundation, footings, bases of columns etc.	sq.mt	48.00		
4.2	Centering and shuttering including strutting propping etc. and removal of form work above plinth level for:				
(a)	Suspended floors, roofs, landings, projections, balconies and access platform.	sq.mt	8.00		
(b)	Lintel, Beam, Plinth beam, columns, arches, piers, pillars, posts and struts.	sq.mt	18.00		
5	<u>DAMP PROOF COURSE</u>				
5.1	Providing and laying damp-proof course 40 mm thick with cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 12.5 mm nominal size with water proofing compound of make Dr. FIXIT or CICO as per manufacturer's specifications	sq.mt	20.00		
6	<u>R.C.C</u>				
6.1	Reinforced cement concrete work in footing, pedestal and column upto plinth level excluding the cost of centering, shuttering, finishing and reinforcement.				
(a)	1:1.5:3 (1 cement: 1.5 coarse sand: 3 graded stone aggregate 20 mm nominal size)	cmt	17.00		
(b)	1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size)	cmt	2.50		

6.2	Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, band, abutments, posts and struts etc. above plinth level excluding the cost of centering, shuttering, finishing and reinforcement.				
(a)	1:1.5:3 (1 cement: 1.5 coarse sand: 3 graded stone aggregate 20 mm nominal size)	cmt	6.50		
(b)	1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size)	cmt	1.50		
6.3	Reinforced cement concrete work in beams, suspended floors, roofs having slope up to 15° landings, balconies, shelves, chajjas, lintels, Coping, bands, plain window sills, staircases above plinth level excluding the cost of centering shuttering.				
(a)	1:1.5:3 (1 cement: 1.5 coarse sand: 3 graded stone aggregate 20 mm nominal size)	cmt	4.00		
(b)	1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size)	cmt	1.00		
6.4	Smooth finishing of the exposed surface of R.C.C. work with 6 mm thick cement mortar 1:3 (1 Cement: 3 fine sand).	sq.mt	1.00		
7	STONE MASONRY				
7.1	Random rubble masonry with hard stone in foundation and plinth including leveling up with cement concrete 1:5:10 (1 cement: 5 coarse sand: 10 graded stone aggregate 20 mm nominal size) in Cement mortar 1:6 (1 cement: 6 coarse sand) including raised / flush pointing in cement mortar 1:3 (1 cement: 3 coarse sand).	cmt.	48.00		
7.2	Random rubble masonry with hard stone in superstructure above plinth level and up to floor five level including leveling up with cement concrete 1:5:10 (1 cement: 5 coarse sand: 10 graded stone aggregate 20 mm nominal size) at window sills, ceiling level and the like in Cement mortar 1:6 (1 cement: 6 coarse sand) including raised / flush pointing in cement mortar 1:3 (1 cement: 3 coarse sand)	cmt.	4.00		
8	BRICK WORK				
8.1	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 75 in foundation and plinth in:				
(a)	Cement mortar 1:6 (1 cement: 6 coarse sand)	cmt	12.00		
8.2	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level all shapes and sizes in :				
(a)	Cement mortar 1:6 (1 cement: 6 coarse sand)	cmt	8.00		
8.3	Half brick masonry with First Class bricks of class designation 75 above plinth level up to floor V level all shapes and sizes in including 2 nos. 6 mm dia M.S bars at every third course:				

(b)	cement mortar 1:4 (1 cement: 4 coarse sand)	sq.mt	70.00		
9	<u>STEEL REINFORCEMENT</u>				
9.1	Steel Reinforcement for R.C.C work including Straightening, cutting, bending, placing in position and binding all complete upto plinth:				
(a)	Thermo-Mechanically Treated bars	kg	750.00		
9.2	Steel Reinforcement for R.C.C work including Straightening, cutting, bending, placing in position and binding all complete above plinth:				
(a)	Thermo-Mechanically Treated bars	kg	250.00		
10	<u>STRUCTURAL STEEL</u>				
10.1	Structural steel work riveted, bolted or welded in built up sections, single section, frame work, including connecting plate cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.				
(a)	In frames, staging, guard bar, ladder, railings, brackets, gates, truss, post and similar works.	Kg	7500.00		
10.2	Providing fitting, fixing fan hook MS round rod of 16mm dia (SAIL steel) with all cost of material, labour, conveyance, T&P and complete as per the direction of BECIL representative.	each	1.00		
11	<u>CEMENT PLASTER</u>				
11.1	18 mm cement plaster in two coats under layer 12 mm thick cement plaster 1:5 (1 cement: 5 coarse sand) finished with a top layer 6 mm thick cement plaster 1:6 (1 cement: 6 fine sand).	sq.mt	75.00		
11.2	15 mm internal cement plaster of mix: 1:6 (1 cement: 6 fine sand).	sq.mt	155.00		
12	<u>WALL TILE</u>				
12.1	Providing and fixing Ist quality ceramic glazed wall tiles conforming to IS:15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by BECIL representative, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade complete. (Basic rate of tile Rs 450/- per sqm)	sq.mt	40.00		
13	<u>FLOORING</u>				

13.1	Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS : 15622, of approved make, in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand), including grouting the joints with white cement and matching pigments etc., complete. (Basic rate of tile Rs 600/- per sqm)	sq.mt	130.00		
13.2	Providing and laying Vitrified tiles in different sizes (thickness to be specified by manufacturer), with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make, in all colours & shade, in skirting, 100 mm high over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), including grouting the joint with white cement & matching pigments etc. complete. (Basic rate of tile Rs 600/- per sqm).	sq.mt	11.00		
13.3	25 mm thick rubbed stone with single length of 1.20 Meter in Tread of steps, dado and pillars laid on 15 mm (average) thick cement mortar 1:5 (1 cement: 5 coarse sand) and jointed with white cement slurry mixed with pigment to match the shade of the stone, including finishing of nosing etc. complete.				
	(a) White Sand Stone	sq.mt	20.00		
13.4	25 mm thick rubbed stone with single length of 1.20 Meter in riser of steps, dado and pillars laid on 15 mm (average) thick cement mortar 1:5 (1 cement: 5 coarse sand) and jointed with white cement slurry mixed with pigment to match the shade of the stone, including finishing of nosing etc. complete.	sq.mt	10.00		
	(a) White Sand Stone				
13.5	Making floor trench required for cables etc inside the building constructed of half brick work in bottom include a lid in 25mm thick block board of ISI specification covering the trench with floor tiles fixed to the lid with araldite or any other approved fixative. Each lid shall not be more than 300x1200 mm and fixed within frame of MS angle 25mm x25mm as per drawing.	rmt.	30.00		
13.6	52 mm thick cement concrete flooring under layer 40 mm thick cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size) and top layer 12 mm thick cement concrete consisting of mix 1:2 (1 cement: 2 graded stone aggregate 6 mm nominal size) by volume, this includes cost of cement slurry, but excluding the cost of nosing of steps etc. complete.	sq.mt	18.00		
13.7	Cement concrete pavement with 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size), including finishing complete.	cmt	2.00		

13.8	Providing and fixing 18 mm thick gang saw cut marble, polished, machine cut for pantry platforms of required size, approved shade, colour and texture with opening of required size & shape for sink in pantry marble platform, including necessary holes for pillar taps etc. including moulding, rubbing and polishing of cut edges etc. complete, laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, including rubbing, curing, moulding and polishing to edges to give polished finish etc.	sq.mt	4.00		
13.9	Extra for fixing marble /granite stone, over and above corresponding basic item, in facia and drops of width upto 150 mm with epoxy resin based adhesive, including cleaning etc. complete.	rmt.	5.00		
14	<u>DOORS AND WINDOWS</u>				
14.1	Providing and fixing aluminum work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminum sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminum snap beading for glazing / paneling, C.P. brass / stainless steel screws, dash fasteners all complete as per architectural drawings and the directions of BECIL representative. (Glazing and paneling to be paid for separately). Anodized aluminum (anodized transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15). For fixed portion.	Sq.mt	12.00		
14.1.1	For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required including fittings etc.				
(a)	Anodized aluminum (anodized transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15)	Sq.mt	20.00		
14.2	Providing and fixing 12 mm thick prelaminated particle board flat pressed three layer or graded wood particle board conforming to IS: 12823 Grade I Type II, in paneling fixed in aluminum doors, windows shutters and partition frames with C.P. brass / stainless steel screws etc. complete as per architectural drawings and directions of BECIL representative.				
(a)	Pre-laminated particle board with decorative lamination on both sides	Sq.mt	3.00		

14.3	Providing and fixing glazing in aluminum door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of BECIL representative.				
(a)	With float glass panes of 5.50 mm thickness	Sq.mt	30.00		
14.4	Providing and fixing double action hydraulic floor spring of approved brand and manufacture conforming to IS : 6315, having brand logo embossed on the body / plate with double spring mechanism and door weight up to 125 kg, for doors, including cost of cutting floors, embedding in floors as required and making good the same matching to the existing floor finishing and cover plates with brass pivot and single piece M.S. sheet outer box with slide plate etc. complete as per the direction of BECIL representative.				
(a)	With stainless steel cover plate minimum 1.25 mm thickness	each	8.00		
14.5	Filling the gap in between aluminum frame & adjacent RCC/ Brick/ Stone work by providing weather silicon sealant over backer rod of approved quality as per architectural drawings and direction of BECIL representative complete.				
(a)	Up to 5mm depth and 5 mm width	Rmt.	55.00		
14.6	Providing and fixing ISI marked anodized handles (anodic coating not less than grade AC 10 per IS:1868) transparent or Dyed to require colour or shade with necessary screw etc. complete. 250 X 63 X 4 mm as per direction of BECIL representative.	each	26.00		
14.7	Providing and fixing bright finished brass 100 mm mortice lock with 6 levers with necessary screw etc. complete (best make of approved quality).	each	8.00		
15	<u>INTERIOR FINISHING</u>				
15.1	Surface painting with Synthetic enamel paint of approved brand and manufacture, having VOC (Volatile Organic Compound) content less than 150 gm/litre (for truss and purlins) in two or more coats	sq.mt	85.00		
15.2	Wall/ ceiling painting in two or more coats on new work with premium acrylic emulsion paint of interior grade, having VOC (Volatile Organic Compound) content less than 50 grams/ litre of approved brand and manufacture, including applying additional coats wherever required to achieve even shade and colour the wall surface shall be prepared with one coat of water thinnable cement primer of approved brand and manufacture having VOC content less than 50 grams/litr	sq.mt	500.00		
15.3	Applying priming coats with primer of approved brand and manufacture, having low VOC (Volatile Organic Compound) content.				

(a)	The surface shall be prepared with ready mixed red oxide zinc chromatic on steel / iron works having VOC content less than 250 grams/ litre	sq.mt	5.00		
16	<u>EXTERIOR FINISHING</u>				
16.1	Finishing walls with Acrylic Smooth exterior paint of required shade.				
(a)	New work (Two or more coats applied @ 1.67 ltr/10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/ 10 sqm)	sq.mt	85.00		
17	<u>CONCRETE PAVERS</u>				
17.1	Providing and laying factory made coloured chamfered edge Cement Concrete paver blocks of required strength, thickness & size/shape, made by table vibratory method using PU mould, laid in required colour & pattern over 50mm thick compacted bed of fine sand, compacting and proper embedding/laying of inter locking paver blocks into the sand bedding layer through vibratory compaction by using plate vibrator, filling the joints with jamuna sand and cutting of paver blocks as per required size and pattern, finishing and sweeping extra sand in footpath, parks, lawns, drive ways or light traffic parking etc. complete as per manufacturer's specifications & direction of BECIL representative 80mm thick C.C. paver block of M-30grade with approved colour, design & pattern.	sq.mt	50.00		
18	<u>PUF PANEL</u>				
18.1	Providing and fixing PUF insulated sandwich panels for roof having top profile sheet with 28-30mm crust high at 195-200mm pitch, inner liner tray and PUF Insulation between not less than 50 mm thick and width 980mm. Panel shall have 0.50mm thick precoated GI sheet on both side of polyurethane foam confirming to IS 12436:1988 with standard profile with tongue & groove arrangement. The Precoated sheet shall be of minimum 240 mpa steel grade confirming to IS 14246:1995 and shall have zinc coating of minimum 120 gsm as per IS:277:1992, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 20 micron. The PPGI sheet shall have plastic protective guard film of minimum 25 microns to avoid scratches while transportation. The PU foam shall be self-extinguishing, fire retardant type having minimum density of 40 Kg/cum (+,-2 Kgs) including CFC Free panel should be GRIHA Certified. The panels shall be fixed to the steel frame structure with minimum 5 mm thick self tapping GI screws with EPDM seal of required length and nos. with minimum spacing of 300 mm c/c assembly/ the cost shall include ridge, soffit junctions & flashings as specified puff panel makers. Refer appendix-1	sq.mt	160.00		

18.2	Providing and fixing PUF insulated sandwich panels for walls of total thickness not less than 100mm and width 1.0 m having tongue and groove edge finish with cam lock arrangement. Panel shall have 0.5mm thick precoated GI sheet on both side of polyurethane foam confirming to IS 12436:1988. The Precoated sheet shall be of minimum 240 mpa steel grade confirming to IS 14246:1995 and shall have zinc coating of minimum 120 gsm as per IS:277:1992, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 20 micron. The PPGI sheet shall have plastic protective guard film of minimum 25 microns to avoid scratches while transportation. The PU foam shall be self-extinguishing, fire retardant type having minimum density of 40 Kg/cum(+,-2 Kgs) including CFC Free panel should be GRIHA Certified. The panels shall be fixed to the steel frame structure with minimum 5 mm thick self-tapping GI screws of required length and nos. with minimum spacing of 300 mm c/c . Payment of G.I boxes/Conduits will be paid separately.Refer appendix-1				
(a)	100mm PUFF panel external wall	Sq.mt	120.00		
19	<u>GUTTER</u>				
19.1	Providing and fixing precoated galvanized steel sheet roofing accessories 0.50 mm (+ 0.05 %) total coated thickness, Zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 20 microns using self-drilling/ self-tapping screws complete : Gutter (600mm overall girth)	rmt.	30.00		
20	<u>FALSE CEILING</u>				

20.1	<p>Providing and fixing 12mm gyp board false ceiling at all height including providing and fixing of frame work made of special sections, power pressed from M.S. sheets and galvanized with zinc coating of 120 gms/sqm (both side inclusive) as per IS : 277 and consisting of angle cleats of size 25 mm wide x 1.6 mm thick with flanges of 27 mm and 37mm, at 1200 mm center to center, one flange fixed to the ceiling with dash fastener 12.5 mm dia x 50mm long with 6mm dia bolts, other flange of cleat fixed to the angle hangers of 25x10x0.50 mm of required length with nuts & bolts of required size and other end of angle hanger fixed with intermediate G.I. channels 45x15x0.9 mm running at the spacing of 1200 mm center to center, to which the ceiling section 0.5 mm thick bottom wedge of 80 mm with tapered flanges of 26 mm each having lips of 10.5 mm, at 450 mm center to center, shall be fixed in a direction perpendicular to G.I. intermediate channel with connecting clips made out of 2.64 mm dia x 230 mm long G.I. wire at every junction, including fixing perimeter channels 0.5 mm thick 27 mm high having flanges of 20 mm and 30 mm long, the perimeter of ceiling fixed to wall/partition with the help of rawl plugs at 450 mm center, with 25mm long dry wall screws @ 230 mm interval, including fixing of gypsum board to ceiling section and perimeter channel with the help of dry wall screws of size 3.5 x 25 mm at 230 mm c/c, including jointing and finishing to a flush finish of tapered and square edges of the board with recommended jointing compound , jointing tapes , finishing with jointing compound in 3 layers covering upto 150 mm on both sides of joint and two coats of primer suitable for board, all as per manufacturer's specification and also including the cost of making openings for light fittings, grills, diffusers, cutouts made with frame of perimeter channels suitably fixed, all complete as per drawings, specification and direction of the BECIL representative but excluding the cost of painting.</p>	sq.mt	130.00		
20.2	<p>Providing and fixing 12mm gyp board wall paneling at all height including providing and fixing of frame work made of special sections, power pressed from M.S. sheets and galvanized with zinc coating of 120 gms/sqm (both side inclusive) as per IS : 277 , including fixing of gypsum board to wall section with the help of dry wall screws of size 3.5 x 25 mm at 230 mm c/c, including jointing and finishing to a flush finish of tapered and square edges of the board with recommended jointing compound , jointing tapes , finishing with jointing compound in 3 layers covering upto 150 mm on both sides of joint and two coats of primer suitable for board, all as per manufacturer's specification and also including the cost of making openings for doors, windows, cable tray, any holes/slots for electrical cables etc. cutouts</p>				

	made with frame of perimeter channels suitably fixed, all complete as per drawings, specification and direction of the BECIL representative but excluding the cost of painting. This shall include securing, fixing of G.I concealed metal boxes, PVC conduits and cutouts in gypsum board to take modular plates/switches as per direction of BECIL representative.				
a	40mm overall thickness partition with 12.5 mm thick single skin tapered edged plain Gypsum board conforming to IS: 2095: part I	sq.mt	105.00		
21	<u>POP PUNNING</u>				
21.1	Providing & applying plaster of paris of required thickness (6mm to 8mm) on plastered walls to mend flaws, alignment, angles, corners & edges. Finished surface to be made smooth and includes scaffolding etc. complete in all respects	sq.mt	100.00		
22	<u>FENCING</u>				
(a)	Supplying & fixing of M.S Angle/MS T post & strut of required size with M.S angle welded & grouted in concrete.	kg.	500.00		
(b)	Providing & fixing galvanized welded wire mesh having wire spacing of 50x50x3 steel wire fencing with posts of MS Steel as per design placed and embedded / welded angles posts etc. (Cost of posts, struts, earth work and concrete work to be paid for separately).	Kg.	50.00		
23	<u>FIRE EXTINGUISHERS</u>				
23.1	S&I of ISI marked water Co2 type 9ltr capacity Fire extinguisher.	each	1.00		
23.2	S&I of ISI marked Co2 type 4.5 Kg. capacity Fire extinguishers.	each	2.00		
	TOTAL (Rs)				

BOQ for Construction of new CTI building (PORTA CABIN TYPE) located at AIR Jhansi (UP) on behalf of Private Broadcasters for FM PHASE - III (BATCH – 1)..... Electrical Works

S.N	Description	Unit	Qty	Rate	Amount
1	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FR PVC insulated copper conductor single core cable in surface / recessed PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FR PVC insulated copper conductor single core cable etc as required. (Anchor Roma make or Havells)	Point	38.00		
2	Wiring for light/ power plug with 2X4 sq. mm FR PVC insulated copper conductor single core cable steel in surface/ recessed conduit along with 1 No 4 sq. mm FR PVC insulated copper conductor single core cable for loop earthing as required.	Mtr.	220.00		
3	S/F 15/16 Amp plate type switch along with 3 pin 15/16 Amp socket outlet on plate complete i/c modular box as required (Anchor Roma make or euaivalent)	Nos.	14.00		
4	Wiring for circuit wiring in PVC insulated copper conductor cable in surface/ recessed pvc conduit as required				
(a)	3x1.5 Sqmm	Mtr.	250.00		
5	Supply and fixing of following sizes pvc conduit along with the accessories in surface / recess including painting in case of surface conduit, or cutting the walls and making good the same in case of recessed conduit as required.				
(a)	25 mm	Mtr.	40.00		
6	Supplying and fixing G.I metal box of new rolled sheet, min 18 gauge, corrosion resistant of following size (nominal size) on surface or in recessed with suitable size of Phenolic laminated sheet cover in the front including providing & fixing 3pin 5/6 AMP socket outlet and 5/6amp modular type switch connection, painting etc. as required.				
(a)	75mmx75mmx 60mm deep (for cables termination of ceiling fittings)	Nos.	9.00		
(b)	100mmx100mm x60 mm deep	Nos.	7.00		
7	Supplying and fixing installation testing & commissioning of the following light fittings on the existing false ceiling ht. Up to 4.0 mt. Height or on the wall complete as required.				
(a)	600 x600 (39 W Led Light) (Philips Make (Philips	Each	14.00		

	green Square) Cat no. RC 140B				
(b)	Circular down lighter (18W Led light) Philips make, Cat no. DN 193	Each	6.00		
(c)	300 x300 (15W Led Light) (Philips Make (Philips green Square) Cat no. BBS 175	Each	4.00		
8	Supply & Fixing of following type fluorescent fittings stove enameled control gear and side panels duly wired with heavy duty copper chokes, rotor, holder, starter, starter holder fluorescent tube & condenser for power factor improvement etc. complete as required.				
(a)	1x40 watt (As per Philips cat. no. TMC 55/136 HPF)	Each	1.00		
9	Supplying, fixing and commissioning of white ceiling fan, 1200 mm dia complete with, all accessories speed regulator suitable for 230 volt Ac Supply complete as required. (Khaitan, Crompton)	Each	2.00		
(a)	Supplying and fixing Exhaust Fan of 300 mm complete with, all accessories suitable for 230 volt Ac Supply complete as required. (Khaitan, Crompton)	Each	2.00		
10	Earthing with G.I earth Pipe 3.0 m long x 40mm dia including accessories and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. complete as required / i.c extra for using salt & charcoal for pipe earth electrode as required.	Set	2.00		
11	Providing and fixing 6 SWG dia G,I, wire on surface or in recessed for loop earthing along with the existing surface/ Recessed cable as required.	Mtr.	40.00		
12	Providing & fixing 4.00 mm dia copper conductor wire for loop earthing in the existing surface or in recess conduit /submain wiring/cable etc. as required	Mtr.	30.00		
13	SDB Supplying & fixing of following sheet steel, MCB distribution board 240/415 volts on surface/recess complete with tinned copper busbar, neutral busbar, earth bar, din bar, detachable gland plate interconnection i/c painting earthing etc as required.				
(a)	4+8 module DB (Incoming + Out going)	No.	1.00		
(b)	4 + 12 module DB (Incoming + Out going)	No.	1.00		
14	Supply & Fixing of following MCB/ Isolator of the following poles in the existing MCB DB complete with connections, testing and commissioning, etc. as required. (Cat B)				
(a)	6 A, SP, MCB	Nos.	9.00		
(b)	16 A, SP, MCB	Nos.	8.00		

(c)	32A TPN MCB	Nos.	6.00		
	<u>OUT-DOOR LIGHTS & FRP POLES</u>				
15	Supply, Install, Test & Commission (S.I.T.C) of 4 M high FRP poles-tapered, round/square shaped with single bracket of 1.0 M at a tilt of 10 degree from horizontal and junction box.	Each	4.00		
16	Supply, Install, Test & Commission (S.I.T.C) of the following outdoors light complete with the complete gear associated with it to make it functional as required:				
(a)	LED based street light fixture with a power consumption of 18 Watts, type LSL 416 MP of Crompton Greaves make.	Each	4.00		
17	SITC of following size pvc insulated pvc sheathed copper conductor armoured cable of 1.1KV grade complete as required.				
(a)	3.5x25 Sq.mm Copper conductor on surface/trench	Mtr.	15.00		
(b)	4 X 16 Sq.mm	Mtr.	110.00		
18	S.I.T.C of 150w HPSV flood light fitting complete with all accessories (as per Philips Cat.no SWF 230SK/150 W (SYM)along with 1 No. lamp and control gear box with the required necessary work including making earthing connection etc.as required.	Nos.	2.00		
	TOTAL (Rs)				
	Note : 1. Unless otherwise specified the work is to be carried out as per CPWD specifications. 2. All the cables /wires shall confirm to the relevant IS Codes.				

BOQ for Construction of new CTI building (PORTA CABIN TYPE) located at AIR Jhansi (UP) on behalf of Private Broadcasters for FM PHASE - III (BATCH – 1)...Sanitary & Water Supply works

S.N	Description	Unit	Qty	Rate	Amount
1	Providing and fixing white vitreous china pedestal type water closet (European type) with seat and lid, 10 litre low level white vitreous china flushing cistern & C.P. flush bend with fittings & C.I. brackets, 40 mm flush bend, overflow arrangement with specials of standard make and mosquito proof coupling of approved municipal design complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required:				
(a)	W.C. pan with ISI marked white solid plastic seat and lid	each	1.00		
2	Providing and fixing white vitreous china flat back half stall urinal of size 580x380x350 mm with white PVC automatic flushing cistern, with fittings, standard size C.P. brass flush pipe, spreaders with unions and clamps (all in C.P. brass) with waste fitting as per IS: 2556, C.I. trap with outlet grating and other couplings in C.P. brass, including painting of fittings and cutting and making good the walls and floors wherever required :				
(a)	Single half stall urinal with 5 litre P.V.C. automatic flushing cistern.	each	1.00		
3	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require:				
(a)	White Vitreous China Wash basin size 630x450 mm with a pair of 15 mm C.P. brass pillar taps.	each	1.00		
4	Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink as per IS: 13983 with C.I. brackets and stainless steel plug 40 mm, including painting of fittings and brackets, cutting and making good the walls wherever required:				
(a)	Kitchen sink without drain board 470x420 mm bowl depth 178 mm	each	1.00		
5	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete.				
(a)	32mm dia. flexible pipe	each	1.00		
6	Providing and fixing 100 mm sand cast Iron grating for gully trap.	each	2.00		
7	Providing and fixing 600x450 mm beveled edge mirror of superior glass (of approved quality) complete with 6 mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete.	each	1.00		
8	Providing and fixing toilet paper holder:				
(a)	C.P. brass	each	1.00		
9	Providing and fixing M.S. stays and clamps for SWR PVC pipes of diameter:				
(a)	110 mm pipe	each	5.00		
10	Providing and fixing on wall face unplasticised Rigid PVC rain water pipes conforming to IS: 13592 Type A, including jointing with seal ring conforming to IS: 5382,				

	leaving 10 mm gap for thermal expansion. (i) Single socketed pipes.				
(a)	110 mm diameter	Mtr.	20.00		
11	Providing and fixing on wall face unplasticised - PVC moulded fittings/ accessories for unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS :5382, leaving 10 mm gap for thermal expansion.				
(a)	Bend of 87.5 degree	each	4.00		
(b)	Shoe 110mm	each	2.00		
12	Providing and fixing unplasticised -PVC pipe clips of approved design to unplasticised - PVC rain water pipes by means of 50x50x50 mm hard wood plugs, screwed with M.S. screws of required length, including cutting brick work and fixing in cement mortar 1:4 (1 cement: 4 coarse sand) and making good the wall etc. complete.				
(a)	110 mm pipe	each	16.00		
13	Cutting chases in brick masonry walls for following diameter SWR PVC pipes and making good the same with cement concrete 1:3:6 (1 cement : 3 coarse sand :6 graded stone aggregate cement concrete 1:3:6 (1 cement : 3 coarse sand :6 graded stone aggregate 12.5 mm nominal size), including necessary plaster and pointing in cement mortar 1:4 (1 cement : 4 coarse sand) :				
(a)	110 mm	Mtr.	2.00		
(b)	75 mm dia	Mtr.	1.00		
14	Providing and fixing CP brass Bottle Trap for Wash basin and sink.				
(a)	Bottle trap 31mm single piece moulded with height of 270 mm, effective length of tail pipe 260 mm from the centre of the waste coupling, 77 mm breadth with 25 mm minimum water seal, weighing not less than 500 gms.	each	1.00		
15	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of BECIL representative.				
15.1	Concealed work , including cutting chases and making good the walls etc.				
(a)	15 mm nominal outer dia Pipes	Mtr.	5.00		
(b)	20 mm nominal outer dia Pipes	Mtr.	20.00		
(c)	25 mm nominal outer dia Pipes	Mtr.	40.00		
15.2	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings This includes jointing of pipes & fittings with one step CPVC solvent cement, trenching refilling & testing of joints complete as per direction of BECIL representative				
15.2.1	External work				

(a)	25 mm nominal outer dia Pipes	Mtr.	3.00		
(d)	32 mm nominal outer dia Pipes	Mtr.	7.00		
(c)	50 mm nominal outer dia Pipes	Mtr.	10.00		
16	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) :				
(a)	25 mm nominal bore	each	1.00		
17	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete:				
(a)	25mm nominal bore	each	2.00		
18	Providing and fixing uplasticised PVC connection pipe with brass unions:				
(a)	45 cm length 20 mm nominal bore	Mtr.	2.00		
19	Constructing masonry Chamber 60x60x75 cm inside, in brick work in cement mortar 1:4 (1 cement : 4 coarse sand) for sluice valve, with C.I. surface box 100mm top diameter, 160 mm bottom diameter and 180 mm deep (inside) with chained lid and RCC top slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) , i/c necessary excavation, foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick, finished with a floating coat of neat cement complete as per standard design :				
(a)	With common burnt clay F.P.S. (non modular) bricks of class designation 75	each	1.00		
20	Providing and placing on staging, double layered polyethylene water storage tank, ISI: 12701 marked, with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but with fittings including float ball, nipples, unions, reducers etc. But excluding base support for tank.	litre	1000.00		
21	Providing and fixing C.P. brass bib cock of approved quality to BECIL representative approval.				
(a)	15 mm nominal bore	each	2.00		
22	Providing and fixing C.P. brass angle valve for basin mixer points of approved quality conforming to IS:8931				
(a)	15mm nominal bore	each	2.00		
23	Making hole up to 20x20 cm and embedding pipes up to 150 mm diameter in masonry and filling with cement concrete 1:3:6 (1 cement: 3 coarse sand 6 graded stone aggregate 20 mm nominal size) including disposal of malba.	Mtr.	2.00		
24	Providing, laying and jointing SWR PVC including testing of joints etc. complete:				
(a)	150 mm diameter pipe	Mtr.	10.00		
(b)	100 mm diameter pipe	Mtr.	40.00		
(c)	75 mm diameter pipe	Mtr.	3.50		
25	Providing and laying cement concrete 1:5:10 (1 cement: 5 coarse sand: 10 graded stone aggregate 40 mm nominal size) up to haunches of SWR PVC pipes including bed concrete as per standard design:				
(a)	150 mm diameter pipe	Mtr.	10.00		

(b)	100 mm diameter pipe	Mtr.	38.00		
(c)	75 mm diameter pipe	Mtr.	3.00		
26	Providing and fixing square-mouth 110 mm gully trap in SWR PVC complete with C.I. grating brick masonry chamber with water tight C.I. cover with frame of 300 x300 mm size (inside) the weight of cover to be not less than 4.50 kg and frame to be not less than 2.70 kg as per standard design:				
(a)	150x100mm size P-Trap with common burnt clay F.P.S. (non modular) bricks of class designation 75	each	2.00		
27	Providing and fixing on wall face SWRPVC soil, waste and vent pipes including jointing with rubber lubricant/cement solvent				
(a)	110mm dia.	each	6.00		
28	Providing and fixing SWRPVC plain bend of required degree (87.50°) including jointing with rubber lubricant/cement solvent complete.				
(a)	110 mm dia.	each	4.00		
(b)	75 mm dia.	each	3.00		
29	Providing and fixing single equal SWRPVC plain junction of required degree (T-junction).				
(a)	110x110x110mm.	each	2.00		
30	Providing and fixing SWR PVC socket including jointing with rubber lubricant/cement solvent.				
(a)	110mm dia socket.	each	3.00		
(b)	75 mm dia socket.	each	1.00		
31	Providing and fixing ventilation cowl including jointing with rubber lubricant/cement solvent complete.				
(a)	110mm SWR PVC vent cowl	each	2.00		
32	Providing and fixing 125/110 P-trap SWR PVC including joining with rubber lubricant/ solvent cement.				
(a)	125/110 P-trap	each	2.00		
33	Constructing brick masonry manhole in cement mortar 1:4 (1 cement : 4 coarse sand) with R.C.C. top slab with 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design :				
33.1	Inside size 60x60 cm and 60 cm deep including C.I. cover with frame (light duty) 45x45 cm internal dimensions, total of cover and frame to be not less than 38 kg (weight of cover 23kg and weight of frame 15 kg):				
(a)	With common burnt clay F.P.S. (non modular) bricks of class designation 75	each	1.00		

34	Providing M.S. foot rests including fixing in manholes /septic tank with 20x20x10 cm cement concrete blocks 1:3:6 (1 cement: 3 coarse sand: 6 graded stone aggregate 20 mm nominal size) as per standard design:				
(a)	With 20x20 mm square bar	each	5.00		
35	Supplying and fixing C.I. cover without frame for manholes:				
(a)	455 x 610 mm rectangular C.I. cover (light duty) the weight of the cover to be not less than 23 kg	each	2.00		
36	Supplying and fixing C.I. cover 300x300 mm with frame for gully trap (standard pattern) the weight of cover to be not less than 6 kg.	each	2.00		
37	Making soak pit 1.2 m diameter 1.2 metre deep with 30 x 30 cm dry brick honey comb shaft with bricks and PVC. drain pipe 100 mm diameter, 1.2 m long complete as per standard design.				
(a)	With common burnt clay F.P.S (non modular) bricks of class designation 75	each	1.00		
38	Supply, installation, testing and commissioning of mono block type 1HP pump for domestic use consisting of (pump of Crompton Greaves or Kiloskar). This includes:				
(a)	Control Panel with auto-change over,				
(b)	All accessories required for the control of system				
(c)	All interconnection piping	each	1.00		
(d)	Electrical connection to pumps from panel using suitable conductors and earthing of equipment, Including Required valves, foot valves, Water Lvl sensors etc				
(e)	Required cabling with termination setc(approx35m) to On and OFF the pumps as per the water lvl indications in the overhead tank				
	Total (Rs)				
Note:	<p>1.Unless otherwise specified the work is to be carried out as per CPWD specifications.</p> <p>2. CPVC & SWR PVC pipes shall be of following makes: Supreme or Prince</p> <p>(a) Drainage pipes test pressure to conform to 10 Kgf/cmsq pipes conforming to IS 4985:2000</p> <p>b) Rain water pipes test pressure to conform to 6 Kgf/cmsq pipes conforming to IS 4985:2000</p>				