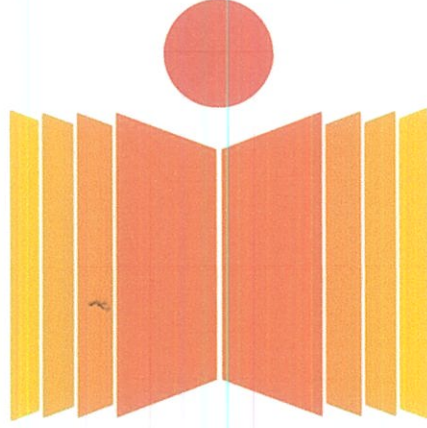


NIT No. IITH/CMD/CIVIL/NIT/2022-23/ 09



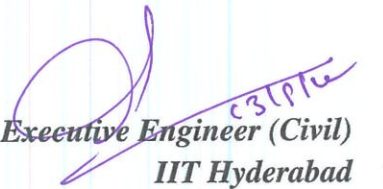
भारतीय प्रौद्योगिकी संस्थान हैदराबाद
Indian Institute of Technology Hyderabad

NOTICE INVITING TENDER (NIT)

Volume - 1

Notice Inviting Tender and Special Conditions of Contract

Name of the work: Construction of precast 2Nos Faculty Housing Tower (G+12), 3Nos Staff Housing Towers (G+12) and 3Nos Hostel Blocks (G+6) RCC Structures at IIT Hyderabad, Kandi, Sangareddy.


Executive Engineer (Civil)
IIT Hyderabad

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Name of the work: Construction of precast 2Nos Faculty Housing Tower (G+12), 3Nos Staff Housing Towers (G+12) and 3Nos Hostel Blocks (G+6) RCC Structures at IIT Hyderabad, Kandi, Sangareddy.

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INDIAN INSTITUTE OF TECHNOLOGY HYDERABAD

NOTICE INVITING TENDER

NIT Reference No. IITH/CMD/CIVIL/NIT/2022-23/09

Indian Institute of Technology Hyderabad invites on behalf of President of India online bids (**e-tendering**) Item rate/percentage rate-composite bids in **Two Bid System** on **Engineering, Procurement and Construction (EPC) in Mode I** basis from approved and eligible Composite Contractors of CPWD and those of appropriate list of M.E.S., BSNL, Railway and State P.W.D. (R&B) or working Civil contractors of IIT Hyderabad for the below mentioned work.

The enlistment of the Composite Contractors should be valid on the last date of submission of bid.

Copy of valid contractor's registration certificate, PAN card, GST Registration certificate & GSTIN should accompany the Technical Bid.

1.1	NIT No.:		IITH/CMD/CIVIL/NIT/2022-23/09
1.2	Name of Work:		<i>Construction of precast 2Nos Faculty Housing Tower (G+12), 3Nos Staff Housing Towers (G+12) and 3Nos Hostel Blocks (G+6) RCC Structures at IIT Hyderabad, Kandi, Sangareddy.</i>
1.3	Estimated Cost: (given merely as a rough guide)		<i>Rs. 261,85,58,860/-</i> <i>Civil Component : Rs.204,49,82,350/-</i> <i>Electrical Component: Rs. 57,35,76,510/-</i>
1.4	Earnest Money Deposit (EMD):		<i>Rs. 2,71,85,600/-</i>
1.5	Period of Completion:		<i>(1) Hostel Block(PCH-1).....270 Days</i> <i>(2) Hostel Blocks(PCH-2&3)..... 450 Days</i> <i>(3) Faculty Housing(FT1A-C type).....450 Days</i> <i>(4) Staff Housing(ST1A-E type,</i> <i>ST2A-D type, ST2B-D type).....540 Days</i> <i>(5) Faculty Housing(FT1B-C type).... 720 Days</i>
1.6	Date of Online Publication/Download of Tender		13/09/2022 @1500hrs
1.7	Last Date & time for receiving of Pre-Bid Queries and to mail ID	Date & Time	21/09/2022 @1600 hrs
		To Mail ID:	ee.civil@iith.ac.in
1.8	Pre-Bid Meeting @ Conference Hall, CMD, IIT Hyderabad		22/09/2022 @1030hrs
1.9	Last Date for Submission of Bids		06/10/2022 @1500hrs
1.10	Date and time of Opening of Technical Bids		06/10/2022 @1530hrs
1.11	Date and time of Opening of Financial Bids		To be decided
1.12	Cost of Bid Document:		NIL

The Tender Document can be downloaded from <https://mhrd.euniwizarde.com> OR Central Public Procurement (CPP) Portal <https://eprocure.gov.in/epublish/app> OR Institute website- <https://www.iith.ac.in/tenders/#Civil%20Works>.

The bid is to be submitted online mode only through the E-procurement portal of <https://mhrd.euniwizarde.com> up to the last date and time of submission of tender. Manual bids shall not be accepted. All quotation (both Technical and Financial) should be submitted online through E-procurement portal of <https://mhrd.euniwizarde.com>.

Any queries relating to the process of online bid submission or queries relating to e-tender Portal in general may be directed to the Helpdesk Support - Phone No. 011-49606060. Mail id: - helpdeskeuniwizarde@gmail.com.

INSTRUCTIONS FOR ONLINE BID SUBMISSION:

The Tender Document can be downloaded from <https://mhrd.euniwizarde.com> OR Central Public Procurement (CPP) Portal <https://eprocure.gov.in/epublish/app> OR Institute website- <https://iith.ac.in/tenders>.

The bidders are required to submit soft copies of their bids electronically on the <https://mhrd.euniwizarde.com> using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the Portal, prepare their bids in accordance with the requirements and submitting their bids online.

More information useful for submitting online bids may be obtained at: <https://mhrd.euniwizarde.com>

GUIDELINES FOR REGISTRATION:

1. Bidders are required to enrol on the e-Procurement Portal with clicking on the link “Bidder Enrolment” on the e-tender Portal by paying the Registration fee as applicable + Applicable GST.
2. As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
3. Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the e-Wizard Portal.
4. Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Only Class III Certificates with signing + encryption key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / TCS / nCode / eMudhra etc.) with their profile or bidders can contact help desk for getting the DSC.
5. Only valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC's to others which may lead to misuse.
6. Bidder then logs in to the site through the secured log-in by entering their user ID/password and the password of the DSC / e-Token.
7. The scanned copies of all original documents should be uploaded in **pdf format** on portal <https://mhrd.euniwizarde.com>
8. After completion of registration payment, bidders need to send their acknowledgement copy on help desk mail id helpdeskeuniwizarde@gmail.com for activation of their account.

SEARCHING FOR TENDER DOCUMENTS:

1. There are various search options built in the e-tender Portal, to facilitate bidders to search active tenders by several parameters like Department name, Tender category, estimated value, Date, other keywords, etc. to search for a tender published on the Online Portal

2. Once the bidders have selected the tenders they are interested in, you can pay the form fee and processing fee (NOT REFUNDABLE) by net-banking / Debit / Credit card then you may download the required documents / tender schedules, Bid documents etc. Once you pay both fee tenders will be moved to the respective 'requested' Tab. This would enable the e-tender Portal to intimate the bidders through e-mail in case there is any corrigendum issued to the tender document.
3. The bidder should make a note of the unique Tender No assigned to each tender, in case they want to obtain any clarification/help from the Helpdesk.

PREPARATION OF BIDS:

1. Bidder should take into account any corrigendum published on the tender document before submitting their bids.
2. Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid.
3. Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in **PDF/XLSX/PNG etc., formats**. Bid Original documents may be scanned with 100 dpi with Colour option which helps in reducing size of the scanned document.
4. To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, GST, Annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use "My Documents" available to them to upload such documents.
5. These documents may be directly submitted from the "My Documents" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.
6. Please note the number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that needs to be submitted. Any deviations from these may lead to rejection of the bid.

SUBMISSION OF BIDS:

1. Bidder should log into the website well in advance for the submission of the bid so that it gets uploaded well in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
2. The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document as a token of acceptance of the terms and conditions laid down by IIT Hyderabad.
3. Bidder has to select the payment option as "**e-payment**" to pay the **tender fee / EMD** as applicable and enter details of the instrument.
4. *In case of Bank Guarantee (BG) bidder should prepare the BG as per the instructions specified in the tender document. The BG in original should be posted/couriered/given in person to the concerned official of IIT Hyderabad before the Online Opening of Technical Bid. In case of non-receipt of BG in original by the said time, the uploaded bid will be summarily rejected.*
5. *Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard BOQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BOQ file, open it and complete the white Colored (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BOQ file is found to be modified by the bidder, the bid will be rejected.*
6. The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow

this time during bid submission.

7. All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data, which cannot be viewed by unauthorized persons until the time of bid opening.
8. The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
9. *Upon the successful and timely submission of bid click “Complete” (i.e. after Clicking “Submit” in the portal <https://mhrd.euniwizarde.com>), the portal will give a successful Tender submission acknowledgement & a bid summary will be displayed with the unique id and date & time of submission of the bid with all other relevant details.*
10. The tender summary has to be printed and kept as an acknowledgement of the submission of the tender. This acknowledgement may be used as an entry pass for any bid opening meetings.
11. The off-line tender shall not be accepted and no request in this regard will be entertained whatsoever.
12. As per portal norms Tender Processing Fee will be applicable.

AMENDMENTS OF BID DOCUMENT:

At any time prior to the deadline for submission of Bids, the department reserve the right to add/modify/delete any portion of this document by the issuance of a Corrigendum, which would be published on the website and will also be made available to the all the Bidder who has been issued the tender document. The Corrigendum shall be binding on all bidders and will form part of the bid documents.

ASSISTANCE TO BIDDERS:

For any clarification in using <https://mhrd.euniwizarde.com>

1. Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.
2. Any queries relating to the process of online bid submission or queries relating to e-Wizard Portal in general may be directed to the 24X7 e-Wizard Helpdesk Support.

Please feel free to contact euniwizarde helpdesk (as given below) for any query related to e- tendering -
Phone No. 011-49606060.

Mail id: - helpdeskeuniwizarde@gmail.com

The contact number for the helpdesk is 8448288994/86/87/89/88/81/90/92/82

011-49606060, 07903269552, 9355030608, 9055030613, 7903810198, 9355030606, 9315620706, 9355030623,
9355030628, 8800526452, 9205898228, 9122643040, 9355030604

epochhelpdesk.01@gmail.com, epochhelpdesk.44@gmail.com, epochhelpdesk.06@gmail.com

3. The tender inviting authority has the right to cancel this e-tender or extend the due date of receipt of the bid(s).
4. The bid should be submitted through e-Wizard portal (<https://mhrd.euniwizarde.com/>) only.

NOTICE INVITING TENDER

NIT Reference No. IITH/CMD/CIVIL/NIT/2022-23/09

1. Bidders shall produce definite proof from the appropriate authority, which shall be to the satisfaction of the competent authority, of having satisfactorily completed similar works of magnitude specified below:-

Criteria of eligibility for submission of tender documents apart from basic eligibility:

Three similar works each of value not less than 40% of estimated cost of Civil Component or two similar works each of value not less than 60% of estimated cost of Civil Component or one similar work of value not less than 80% of estimated cost of Civil Component (rounded to nearest Rs. 10 lac) in last 7 (Seven) years ending last day of the month previous to the one in which the tenders are invited.

The value of executed works shall be brought to current costing level by enhancing the actual value of work at simple rate of 7% per annum, calculated from the date of completion to the last date of submission of tender.

Similar work shall mean “Construction of PRECAST RCC structures designed as either beam-column system or wall panel-slab system and in which at least completion of one building of eight storeyed including finishing’s, internal & external public health Engineering systems all completed executed under one agreement in India”. (Godowns/ Ware houses/ factory Sheds shall not be considered as eligible similar works).

However, the similar work experience criteria for internal & external Electro-Mechanical works (i.e. HVAC i/c Radiant Cooling systems, Lifts, DG Sets, ELV, internal & external electrification works etc.) shall be fulfilled by Main Contractor/Agency or their Specialized Agencies as per the Vol-1,Section-4 General Information @Sl.No.2.15(C)

2. The bidder should have had average annual financial turn over (gross) of **Rs. 131.00 Crore** on construction works during the last three Consecutive years ending March 2022, Balance sheets should be duly audited by Chartered Accountant. Year in which no turnover is shown would also be considered for working out the average. (Scanned copy of Audited Balance Sheet to be uploaded).
3. Should not have incurred any loss (profit after tax should be positive) in more than two years during the last five consecutive years ending 31st March 2022, duly audited and certified by the Chartered Accountant.
4. Should have a Net worth certificate of **Rs. 105.00 Cr.** (Scanned copy of original Net Worth certificate issued by bankers, not older than six months from the last date of submission of bids, to be uploaded).
5. Bidding Capacity: Should have bidding capacity equal to or more than the estimated cost of the work put to tender. The bidding capacity shall be worked out by the following formula:
Bidding Capacity = {[AxNx1.5]-B} ≥ Total Estimated Cost Put to Tender

Where,

A = Maximum turnover in construction works executed in any one year during the last seven years taking into account the completed as well as works in progress. The value of completed works shall be brought to current costing level by enhancing at a simple rate of 7% per annum.

N = Number of years prescribed for completion of work for which bids have been invited.

B = Value of existing commitments and ongoing works to be completed during the period of completion of work for which bids have been invited.

- 6.** To become eligible, the tenderer shall have to furnish an affidavit as per Form 'J' of the NIT.
- 7.** Agreement shall be drawn with the successful tenderer on prescribed Form which is as available in the enclosed General Conditions of the Contract, EPC Projects with up to date correction slips, if any. Tenderer shall quote his rates as per various terms and conditions of the said form which will form part of the agreement.
- 8.** The time allowed for carrying out the work will be as stated at para 1 from the date of start as defined in schedule 'F' or from the first date of handing over of the site, whichever is later, in accordance with the phasing, if any, indicated in the tender documents.
- 9.** The site for the work is available.
- 10.** Tender documents consisting of plans, specifications, the schedule of quantities of the various classes of work to be done and the set of terms & conditions of contract to be complied with by the contractor whose tender may be accepted and other necessary documents can be seen for information at the above mentioned website:
- 11.** Applicants are advised to keep visiting the above mentioned website from time to time (till the deadline for bid submission) for any updates in respect of the tender documents, if any. Failure to do so shall not absolve the applicant of his liabilities to submit the applications complete in all respects including updates thereof, if any. An incomplete application may be liable for rejection.
- 12.** The contractor whose tender is accepted, will be required to furnish performance guarantee of 5% (Five Percent) of the tendered amount within the period specified in Schedule F. This guarantee shall be in the form of 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 or Fixed Deposit Receipts or Guarantee Bonds of any Scheduled Bank or the State Bank of India in accordance with the prescribed form. In case the contractor fails to deposit the said performance guarantee within the period as indicated in Schedule 'F'. including the extended period if any, the Earnest Money deposited by the contractor shall be forfeited automatically without any notice to the contractor.

13. The description of the buildings and work is as follows:

Sl. No.	Building Names	No. of Blocks	No. of Floors	Built up Minimum plinth area in sqm
1	FT1A-C Type	1	G+12	17,090.89
2	FT1B- C Type	1	G+12	17,090.89
3	ST1A-E Type	1	G+12	8,886.15
4	ST2A-D Type	1	G+12	10,155.60
5	ST2B-D Type	1	G+12	10,155.60
6	Hostel Blocks	3	G+6	15,096.00

The proposed precast Hostel building is of Ground + 6 structure and Faculty and Staff Housing Towers of Ground + 12 structure configuration. Approximate plinth area of all buildings is 78,475.00 sq. m., and the building foot print is 14,538 sq. m, which has 168 rooms of 3 Nos Hostel Blocks with double occupancy and 72 flats each in 2 faculty and 3 staff housing towers. To bring the building to immediate occupancy, it is proposed to adopt precast technology for construction. For Hostels, each floor will have 12 rooms in each wing and 24 rooms in both the wings. For Staff & Faculty Towers, each floor will have 6 flats. No dining hall is proposed for the hostel and the boarders will use the existing central dining facility.

Copies of other drawing and documents pertaining to the works will be open for inspection by the tenderers at the office of above mentioned officer.

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

14. Tenders with any condition including that of conditional rebates shall be rejected forthwith.
15. Cost of Bid document and EMD may also be remitted to Institute's account number as per bank particulars given below:

Name of the Account Holder : Indian Institute of Technology Hyderabad
Account Number : 30412797764 (Current Account)
Name of the Bank : State Bank of India
Address of the Bank : IIT Kandi, IIT Hyderabad Campus,

Kandi, Sangareddy, Telangana - 502285
Branch code : 14182
IFSC code : SBIN0014182
MICR code : 502002528
SHIFT code : SBININBB762

16. The competent authority on behalf of the President of India does not bind itself to accept the lowest or any other tender and reserves to itself the authority to reject any or all the tenders received without the assignment of any reason. All tenders in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the tenderer shall be summarily rejected.
17. Canvassing whether directly or indirectly, in connection with tenderers is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable to rejection.
18. The competent authority on behalf of President of India reserves to himself the right of accepting the whole or any part of the tender and the tenderer shall be bound to perform the same at the rate quoted.
19. The contractor shall not be permitted to tender for works if his near relative is posted a Divisional Accountant or as an officer in any capacity between the grades of Superintending Engineer and Junior Engineer (both inclusive). Any breach of this condition by the contractor would render him liable to be removed from the approved list of contractors of this Institute.
20. No Engineer of gazette rank or other Gazetted Officer employed in Engineering or Administrative duties in an Engineering Department of the Government of India is allowed to work as a contractor for a period of one year after his retirement from Government service, without the previous permission of the Government of India in writing. This contract is liable to be cancelled if either the contractor or any of his employees is found any time to be such a person who had not obtained the permission of the Government of India as aforesaid before submission of the tender or engagement in the contractor's service.
21. The tender for the works shall remain open for acceptance for a period of Ninety (90) days from the date of opening of Technical Bids if any tenderer withdraws his tender before the said period or issue of letter of acceptance, whichever is earlier, or makes any modifications in the terms and conditions of the tender which are not acceptable to the department, then the Government shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said earnest money as aforesaid. Further the tenderer shall not be allowed to participate in the retendering process of the work.
22. (A) All taxes, Labour Cess etc., as applicable shall be borne by the contractor himself. The contractor shall quote his rates considering all such taxes including GST on works 5th day prior to the deadline of bid submission. Any recovery towards GST is notified by the competent authority, the same shall be effected and no claim what so ever shall be entertained by IITH. The contractor shall quote his rates accordingly.
- (B) 2% as TDS amount of GST amount payable on the bills will be deducted as per the Govt. of India, Ministry of Finance, Department of Revenue notification vide No.65/39/2018-DOR, dtd: 14-09-2018.

- 23.** *GST registration certificate of the state in which the work is to be taken up, if already obtained by the bidder.*

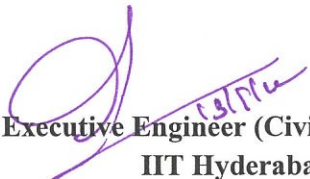
If the bidder has not obtained GST registration in the state in which the work is to be taken up or as required by GST authorities, then in such a case the bidder shall scan and upload following under taking along with other bid documents.

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

- 24.** *Bidder has to submit Undertaking on their letter head pursuant to the Section 206AB (as applicable) of the Income Tax Act,1961 in prescribed format as enclosed at Annexure-A along with each and every bill submitted for payment.*

- 25.** This notice inviting Tender shall form a part of the contract document. The successful tenderer/contractor, on acceptance of his tender by the Accepting Authority shall within 15 days from the stipulated date of start of the work, sign the contract consisting of:-

- a) The Notice Inviting Tender, all the volumes of document including Special conditions of contract, technical & particular specifications, Drawings, Pre-Bid replies etc., if any, forming the tender as issued at the time of invitation of tender and acceptance thereof together with any correspondence leading thereto.
- b) Standard Contract form (General Conditions of Contract, EPC Projects) as enclosed to this tender document. The bidder is deemed to have gone through and understood the Standard Contract Form and the General Conditions of Contract (EPC Projects).


Executive Engineer (Civil)
IIT Hyderabad

(Signature of bidder)

FORM 'J'

AFFIDAVIT

I/we undertake and confirm that our firm/partnership firm has not been blacklisted by any state/Central Departments/PSUs/Autonomous bodies during the last 7 years of its operations. Further that, if such information comes to the notice of the department then I/we shall be debarred for bidding in IIT Hyderabad in future forever. Also, if such information comes to the notice of IIT Hyderabad on any day before date of start of work, the Engineer-in charge shall be free to cancel the agreement and to forfeit the entire amount of Earnest Money Deposit/Performance Guarantee (Scanned copy of this notarized affidavit to be uploaded at the time of submission of bid)

NOTE: Affidavit to be furnished on a 'Non-Judicial' stamp paper worth Rs.100/-

Signature of Bidder(s) or an authorized Officer of the firm with stamp

Signature of Notary with seal

On Contractor/ Agency's Letter Head

Undertaking pursuant to Section 206AB (as applicable) of the Income Tax Act, 1961

To,
Registrar
IIT Hyderabad
Kandi, Sangareddy- 502284

Dear Sir/Madam,

Subject: Declaration confirming filing of Income Tax Return for immediate two preceding years.

I, Ms./Mrs./Mr. _____ in capacity of Authorized Signatory of _____ having PAN _____ and registered office at _____ do hereby declare that _____ has filed Income Tax Returns for immediately last 2 preceding Financial Years as mentioned below per due dates under Section 139 (1) of the Income Tax Act, 1961 ('the Act') and details of which are as given under:

Financial Year for which Income Tax Return was due as per Section 139(1)	Acknowledgement no. of ITR filed under Section 139(1)	Date of Filing
2021-22 (if applicable on date of this declaration)		
2020-21		
2019-20		

Further, I confirm that _____ has lined the above PAN with Aadhaar number as on this date.

I also undertake that _____ hereby indemnify ***Indian Institute of Technology Hyderabad*** for any loss/liability (including any Tax, interest, penalty, etc.) that may arise due to incorrect reporting of above information.

For _____

Signature: _____

Name of person:

Designation:

Place:

Date:

**1.3 PROFORMA OF SCHEDULES: A TO F
(Civil and Electrical Works)**

SCHEDULE “A”	: Schedule of quantity for quoting combined rates for Civil Works and Electrical works as per form page Vol-2(a) page 122 to 138
SCHEDULE “B” Schedule of material to be issued to the agency	: -Nil-
SCHEDULE “C” Tools and Plants to be hired to the agency.	: -Nil-
SCHEDULE “D” Extra schedule for specific requirements / documents for the work, if any	: Refer Part A, B & C
SCHEDULE “E” Extra schedule for specific requirements / documents for the work, if any	: General Conditions of Contract CPWD for EPC Works; GCC 2022 for EPC Projects and Standard Operating Procedures for CPWD Works Manual 2022 as amended / modified up to the last date of submission of Bid.
Name of Work	: <i>Construction of Precast 2Nos Faculty Housing Towers (G+12), 3Nos Staff Housing Towers (G+12) and 3Nos Hostel Blocks (G+6) RCC Structures at IIT Hyderabad, Kandi, Sangareddy.</i>
Estimated Cost of Work	: <i>Rs. 261,85,58,860/- [Civil Component: Rs.204,49,82,350/- Electrical Component: Rs.57,35,76,510/-]</i>
Earnest Money	: <i>Rs. 2,71,85,600/-</i>
Performance Guarantee	: 5% of bid amount valid up to the stipulated date of completion plus 6 months
Security Deposit	: 2.5 % of bid amount + 50% of the PG amount shall be retained as Security Deposit for the Defect Liability Period (DLP)

SCHEDULE “F” (GENERAL RULES & DIRECTIONS)

- a) Officer inviting bid : Executive Engineer (Civil),
Construction and Maintenance Division (CMD),
IIT Hyderabad.
- b) Applicable mode of EPC Contract : *EPC Mode – I*
- c) *Mode of Technology to be adopted* : *Precast framed structure*
- d) *Maximum % of quantity of items of works to be executed of* : (i) *Civil, Horticulture, Road works,.....78%*
External & internal water supply, Sanitary and Sewerage systems etc.,
(ii) *Electro-Mechanical works..... 22%*

Definitions:

- (i) *Engineer-in-charge for Major Component (which includes Civil, Horticulture, Road works, External & Internal Water Supply, Sanitary and Sewerage systems etc., all other than minor component).* : **Executive Engineer (Civil), IITH or successor thereof.**
(Mode of Operandi of major component of work shall be as mentioned @ Sl. No. (34) of Special Conditions of Contract)
- (ii) *Engineer-in-charge for Minor Component (Electrical & Mechanical works)* : **Executive Engineer(Electrical), IITH or successor thereof.**
(Mode of Operandi of minor component of work shall be as mentioned @ Sl. No. (34) of Special Conditions of Contract)
- (iii) Accepting Authority : Director, IIT Hyderabad or successor thereof.
- (iv) Percentage on cost of materials and Labour cover all to overheads and profits : 15%
- (v) Standard Schedule of Rates
(i) Civil Work
(ii) Electrical work
(iii) Horticulture Work
Plinth Area Rates 2021 with modifications and correction slips up to date of submission of bids + Cost Index applicable.

Department : Construction and Maintenance Division,
IIT Hyderabad

Standard Contract Form : CPWD Form 8 & GCC 2022 for Works on EPC mode enclosed with this tender document.

Clause 1:		
	Time allowed for submission of Performance Guarantee, programme chart (Time and Progress) and applicable labour licenses, registration with GST, EPFO, ESIC and BOCW Welfare Board or proof of applying thereof from the date of issue of letter of acceptance	: 15 days
	Maximum allowable extension with late fee (non-refundable) @ 0.1% per day of Performance Guarantee amount beyond the period provided in (i) above	: 10 days with late fee @ 0.1% per day of PG amount
Clause 2:		
	Authority for fixing compensation under clause 2	: Superintending Engineer, Construction and Maintenance Division, IIT Hyderabad or successor thereof.
Clause 5:		
	Number of days from the date of issue of letter of acceptance for reckoning date of start	: 15 days from Letter of Acceptance or handing over of site, whichever is later.
	Contract Value	Recovery per week
	Rs.300 Crores	Rs.50,000/-
	5.1.1 (a) Schedule of Handing over of site:	: 15 days from Letter of Acceptance (LoA)
	5.1.1.(b) Schedule of issue of Designs:	: Not Applicable
	Clause 5.7: Recording of hindrances	: Online only

Table of Mile stones for Precast Hostels (PCH)
Block No.01, Time Period Allowed: 270 Days
(for Composite Major and Minor Components):

Sl. No.	Milestone Programme	Time Allowed (from date of start)	Amount to be withheld in case of non- achievement of milestone
1	Appointment of consultant, submission and approval of Architectural, Structural & MEP / E & M services Drawings.	30	0.25 % of total contract amount.
2	75% of Total work in Financial Terms including Completion and making inhabitable in all aspects the 'Precast Hostel Block No.01'.	90	1.50 % of total contract amount.
3	50% of Total work in Financial Terms	150	1.00 % of total contract amount.
4	75% of Total work in Financial Terms	210	1.00 % of total contract amount.
5	90% of Total work in Financial Terms	250	0.75 % of total contract amount.
6	All civil, electrical & mechanical and horticulture work completed in all aspects in Residential & non-residential buildings with services, clearances from local body/ completion certificates etc. required to declare buildings and campus authorized for occupation.	270	0.50 % of total contract amount.

NOTE:

1. Withheld amount shall be released if and when subsequent milestone is achieved within respective time specified. However, in case milestones are not achieved by the Contractor for the work, the amount shown against milestone shall be withheld without prior notice.
2. Intending bidder may submit phasing of activities/milestones based on their resources and methodology at the time of bidding corresponding to physical milestones/stages indicated in the above table. These shall be formed part of the agreement after approval of the accepting authority, otherwise it would be assumed that agency agrees with the above mentioned physical milestones.

Time allowed for execution of this section of the work : 270 days

Table of Mile stones for Precast Hostels (PCH)
Block No.02 and 03, Time Period Allowed: 450 Days
(for Composite Major and Minor Components):

Sl. No.	Milestone Programme	Time Allowed (from date of start)	Amount to be withheld in case of non- achievement of milestone
1	Appointment of consultant, submission and approval of Architectural, Structural & MEP / E & M services Drawings.	30	0.25 % of total contract amount.
2	25% of Total work in Financial Terms including Completion and making inhabitable in all aspects the 'Precast Hostel Block No.01'.	135	1.50 % of total contract amount.
3	50% of Total work in Financial Terms	240	1.00 % of total contract amount.
4	75% of Total work in Financial Terms	345	1.00 % of total contract amount.
5	90% of Total work in Financial Terms	410	0.75 % of total contract amount.
6	All civil, electrical & mechanical and horticulture work completed in all aspects in Residential & non-residential buildings with services, clearances from local body/ completion certificates etc. required to declare buildings and campus authorized for occupation.	450	0.50 % of total contract amount.

NOTE:

1. Withheld amount shall be released if and when subsequent milestone is achieved within respective time specified. However, in case milestones are not achieved by the Contractor for the work, the amount shown against milestone shall be withheld without prior notice.
2. Intending bidder may submit phasing of activities/milestones based on their resources and methodology at the time of bidding corresponding to physical milestones/stages indicated in the above table. These shall be formed part of the agreement after approval of the accepting authority, otherwise it would be assumed that agency agrees with the above mentioned physical milestones.

Time allowed for execution of this section of the work : 450 days

Table of Mile stones for Faculty Housing Towers
FT1A-C Type, Time Period Allowed: 450 Days
(for Composite Major and Minor Components)

Sl. No.	Milestone Programme	Time Allowed (from date of start)	Amount to be withheld in case of non- achievement of milestone
1	Appointment of consultant, submission and approval of Architectural, Structural & MEP / E & M services Drawings.	45	0.25 % of total contract amount.
2	25% of Total work in Financial Terms including Completion and making inhabitable in all aspects the 'Faculty Housing Towers (FT1A-C Type)'.	150	1.50 % of total contract amount.
3	50% of Total work in Financial Terms	250	1.00 % of total contract amount.
4	75% of Total work in Financial Terms	350	1.00 % of total contract amount.
5	90% of Total work in Financial Terms	410	0.75 % of total contract amount.
6	All civil, electrical & mechanical and horticulture work completed in all aspects in Residential & non-residential buildings with services, clearances from local body/ completion certificates etc. required to declare buildings and campus authorized for occupation.	450	0.50 % of total contract amount.

NOTE:

1. Withheld amount shall be released if and when subsequent milestone is achieved within respective time specified. However, in case milestones are not achieved by the Contractor for the work, the amount shown against milestone shall be withheld without prior notice.
2. Intending bidder may submit phasing of activities/milestones based on their resources and methodology at the time of bidding corresponding to physical milestones/stages indicated in the above table. These shall be formed part of the agreement after approval of the accepting authority, otherwise it would be assumed that agency agrees with the above mentioned physical milestones.

Time allowed for execution of this section of the work : 450 days

**Table of Mile stones for Faculty Housing Towers
FT1B -C Type, Time Period Allowed: 720 Days
(for Composite Major and Minor Components)**

Sl. No.	Milestone Programme	Time Allowed (from date of start)	Amount to be withheld in case of non- achievement of milestone
1	Appointment of consultant, submission and approval of Architectural, Structural & MEP / E & M services Drawings.	45	0.25 % of total contract amount.
2	25% of Total work in Financial Terms including Completion and making inhabitable in all aspects the 'Faculty Housing Towers (FT1A-C Type)'.	215	1.50 % of total contract amount.
3	50% of Total work in Financial Terms	385	1.00 % of total contract amount.
4	75% of Total work in Financial Terms	550	1.00 % of total contract amount.
5	90% of Total work in Financial Terms	650	0.75 % of total contract amount.
6	All civil, electrical & mechanical and horticulture work completed in all aspects in Residential & non-residential buildings with services, clearances from local body/ completion certificates etc. required to declare buildings and campus authorized for occupation.	720	0.50 % of total contract amount.

NOTE:

1. Withheld amount shall be released if and when subsequent milestone is achieved within respective time specified. However, in case milestones are not achieved by the Contractor for the work, the amount shown against milestone shall be withheld without prior notice.
2. Intending bidder may submit phasing of activities/milestones based on their resources and methodology at the time of bidding corresponding to physical milestones/stages indicated in the above table. These shall be formed part of the agreement after approval of the accepting authority, otherwise it would be assumed that agency agrees with the above mentioned physical milestones.

Time allowed for execution of this section of the work : 720 days

**Table of Mile stones for Staff Housing Towers
(ST1A- E Type) and (ST2A & ST2B-D Type), Time Period Allowed: 540 days
(for Composite Major and Minor Components):**

Sl. No.	Milestone Programme	Time Allowed (from date of start)	Amount to be withheld in case of non- achievement of milestone
1	Appointment of consultant, submission and approval of Architectural, Structural & MEP / E & M services Drawings.	45	0.25 % of total contract amount.
2	25% of Total work in Financial Terms including Completion and making inhabitable in all aspects the 'Staff Housing Towers (ST1A - E Type)'.	175	1.50 % of total contract amount.
3	50% of Total work in Financial Terms	290	1.00 % of total contract amount.
4	75% of Total work in Financial Terms	415	1.00 % of total contract amount.
5	90% of Total work in Financial Terms	490	0.75 % of total contract amount.
6	All civil, electrical & mechanical and horticulture work completed in all aspects in Residential & non-residential buildings with services, clearances from local body/ completion certificates etc. required to declare buildings and campus authorized for occupation.	540	0.50 % of total contract amount.

NOTE:

1. Withheld amount shall be released if and when subsequent milestone is achieved within respective time specified. However, in case milestones are not achieved by the Contractor for the work, the amount shown against milestone shall be withheld without prior notice.
2. Intending bidder may submit phasing of activities/milestones based on their resources and methodology at the time of bidding corresponding to physical milestones/stages indicated in the above table. These shall be formed part of the agreement after approval of the accepting authority, otherwise it would be assumed that agency agrees with the above mentioned physical milestones.

Time allowed for execution of this section of the work : 540 days

Authority to decide:			
	(i) Extension of time	:	Superintending Engineer, IIT Hyderabad or successor thereof.
	(ii) Rescheduling of mile stones	:	Superintending Engineer, IIT Hyderabad or successor thereof.
	(iii) Shifting of date of start in Case of delay in handing over of site	:	Superintending Engineer, IIT Hyderabad or successor thereof.
Clause 6:		:	Applicable
Clause 7:			
	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.	:	As per Schedule of Stage Payment, the minimum amount eligible for interim payment is Rs. 2.0 Crores for first three RA bills and Rs.5 Crores for subsequent RA bills. This value includes admissible amount of Secured Advance. However, Engineer in charge at his discretion may release monthly payment even at a lesser amount but the contractor cannot claim as a matter of right and no interest is permitted.
Clause 7A:		:	Yes, Applicable No Running Account Bill shall be paid for the work till the applicable labour licenses, registration with GST, EPFO, ESIC and BOCW Welfare Board, whatever applicable as submitted by the Bidder to the Engineer-in Charge.
Clause 8A:			
	Authority to decide compensation on account if contractor fails to submit completion plans	:	Superintending Engineer, IIT Hyderabad
	This shall not apply for maintenance or upgradation contracts not involving any services For other works, the limit shall be as below:	:	
	Contact Value		Payment Liability Limit in case of failure
	Up to Rs.300 Crores		Rs.15.00 Lakhs
Clause 10A:			Applicable
	List of testing equipment to be provided by the agency at site lab	:	As per CPWD Specification 2019 and List attached as Appendix I; Alternatively, the testing facilities at the precast plant of the agency shall be inspected for adequacy and accepted by the Engineer-in-Charge.

Clause 10 B (i):	:	Applicable
Clause 10 B (ii):	:	Applicable The 10% of the tendered value shall be given as mobilization advance in Two (2) or more instalments within six (06) months of the order to commence the work.
Clause 10 B (iii):	:	Not Applicable
Clause 10 B (iv) & (v):	:	Applicable
Clause 10CC:	:	Applicable (Values of components is as under) 1) Cement: 9% 2) Labour(a) Civil... 20% (b)Electro-Mechanical...5% 3) Civil component of other construction material: 37% 4) E&M component materials: 17% 5) Reinforcement & Structural Steel: 12% 6) Bitumen: Nil 7) POL: Nil
Clause 10CC for Maintenance Period:	:	Not applicable
Clause 11:		
Specifications to be followed for execution of work	:	Civil work: (1) CPWD Specifications 2019 Volume- I & II with corrections slips up to last date of submission of bid.
		Electrical work: 1. CPWD General Specification for Electrical Works Part I Internal – 2013. 2. CPWD General Specification for Electrical Works Part II External – 1994. 3. General Specification for Electrical Works (Part III Lifts & Escalators)-2003. 4. CPWD General Specification for Electrical Works Part IV Substation – 2013. 5. CPWD General Specification for Electrical Works Part V wet riser & sprinkler systems – 2020. 6. CPWD General Specifications for Electrical works Part VI- Fire Detection and Alarm System-2018. 7. CPWD General Specification for Electrical Works Part VII DG Sets – 2013. 8. General Specification for Heating Ventilation & Air- Conditioning-2017.
		Horticulture Work: CPWD Specification of Horticulture & Landscaping – 2020

Note:

- (i) All above specifications shall be applicable along with all correction slips up to the last date of submission/uploading of Bid.
- (ii) In case of discrepancy in mentioned items / description among any of the following two or more documents, the following order of preference shall be followed. If any item required for completing the work in any of the following documents but not in the order of preference below, shall be applicable and nothing extra shall be paid on this account. However, percentages mentioned in “Schedule of Building wise Sub-Heads” shall have precedence among all the following documents for payment purpose.
- a) Description under Scope of work.
 - b) Architectural Drawings and Schedule of finishes.
 - c) Schedule of Quantities.
 - d) Technical Specifications, Particular Specification and Special Condition, if any
 - e) CPWD Specifications, Civil, Electrical & Mechanical and Horticulture with up to date corrections as on last date of submission of Bid.
 - f) GCC for EPC Projects enclosed with the Bid
 - g) Indian Standard Specifications of B.I.S.
 - h) National Building Code 2016
 - i) Manufacturers specifications.
 - j) Sound Engineering practices.
 - k) Decision of Engineer-in-charge.

Note: A reference made to any Indian Standard Specifications in these documents, shall imply to the latest version of that standard, including such revisions/ amendments as issued by the Bureau of India Standards up to last date of submission of tenders. The Contractor shall keep at his own cost all such publications of relevant Indian Standard applicable to the work at site, with correction slips up to last date of submission of bids.

Clause 12:	:	Applicable only for the original construction work. Type of work: Project and original work
Clause 12.1:	:	Applicable
Deviation/variation limit:	:	5%
Clause 12.2: Payment of deviations/variations beyond 0.25% of the accepted tendered amount.	:	In case there is any change in scope as defined in the contract, the contractor shall carry out the changes as per direction of Engineer-in Charge and nothing extra shall be payable to the contractor on account of same if the additional cost of such work is up to 0.25% (zero-point two five percent) of the accepted tendered amount and worked out as per sub-clause 12.3 of GCC 2022. Variations/ deviations up to 0.25% (zero-point two five percent) of the accepted tendered amount shall be deducted from overall variations/ deviations for making payment.
Clause 12.3 & Clause 12.4:	:	Applicable

Clause 16:		
Action in case Work not done as per Specifications	:	Superintending Engineer (Civil), IIT Hyderabad.
Clause 17:	:	Defects liability period shall be three (03) years after declaring the sectional completion of the respective buildings by the Executive Engineer (Civil), IIT Hyderabad.
Clause -19,19A,19B,19C,19D,19E,19F, 19G,19H,19I,19J,19K,19L	:	Applicable
Authority to decide penalty for each default under 19C, 19D, 19G & 19K	:	Executive Engineer (Civil)
Clause 25: Settlement of disputes by Conciliation and Arbitration:		
Conciliator	:	Dean (Planning)
Authority to appoint arbitrator	:	Director, IIT Hyderabad
Place of Arbitration	:	Hyderabad
Venue of Arbitration	:	IIT Hyderabad
Type of Arbitration Tribunal	:	Sole Arbitrator
<i>Note: Provisions of Arbitration and Conciliation Act 1996 with latest amendments in force shall be applicable.</i>		
Clause 31:	:	Not Applicable

Clause 32:

B. The Requirement of Technical / Architectural Personnel required to be deployed for planning stage (Till all the Architectural & structural drawings are prepared & got approved) and their recovery rates at which recovery shall be made from the Contractor in the event of not fulfilling the provision of clause32(i) are as below:

Sl. No.	Qualification	Discipline	Number	Minimum Experience (Years)	Designation	Rate of recovery
1	Post Graduate Architect	Architect	1	12	Lead Architect	Rs. 75,000/- per month
2	Graduate Engineer /Electrical or Mechanical	Electrical/ Mechanical Engineer	1	12	MEP Planner	Rs. 60,000/- per Month per person
3	Graduate Architect	Architect	1	6	Architect	Rs. 40,000/- per Month per person
4	Graduate Engineer/ Civil	Planning/ Civil Engineer	1	12	Lead Engineer	Rs. 60,000/- per month
5	Post Graduate in Structures	Structural Engineer	1	12	Lead Structural Engineer	Rs.75,000/- Per month
6	Graduate Engineer/ Civil	Civil Engineer	1	6	Structural Engineer	Rs. 40,000/- per month
7	Graduate Engineer/ Civil	Civil Engineer	1	6	Civil Engineer	Rs. 40,000/- per month
8	Graduate Engineer	Electrical	1	12	Lead Electrical Engineer	Rs. 60,000/- per month
9	Graduate Engineer/ Mechanical	Mechanical/Electrical	1	12	Lead Mechanical Engineer for HVAC, Radiant Cooling system, Firefighting etc	Rs. 60,000/- per month
10	Graduate Engineer	Electronics & Communications/Computer Science Engineer	1	6	CCTV, LAN, Wi-Fi Networking & Telephone, Fire Alarm System Consultant	Rs. 40,000/- per Month per person
11	Graduate Engineer	Electrical	1	6	Electrical Engineer	Rs. 40,000/- per Month per person
12	Graduate	Environmental	1	6	Green Building Consultant	Rs. 40,000/- per month per person

C. The Requirement of Technical Representative(s) at Site execution and Recovery Rates at which recovery shall be made from the Contractor in the event of not fulfilling the provision of clause 32(i) are as below:

Sl. No.	Qualification	Discipline	Number	Minimum Experience (Years)	Designation	Rate at which recovery shall be made from the Contractor in the event of not fulfilling provision of clause 32(i)
1	Graduate Engineer	Civil.....	1	20	Project Manager with degree in Civil Engineering	Rs. 1,00,000/- per month
2	Graduate Engineer		2	12	Deputy Project Manager	Rs. 60,000/- per Month per person
3	Graduate Engineer or Diploma Engineer		8	5 or 10 Respectively	Project/Site Engineer	Rs. 40,000/- per month per person
4	Graduate Engineer/ Diploma		1	5/10 Respectively	Quality Engineer	Rs. 40,000/- per month per person
5	Diploma Engineer		1	8	Surveyor	Rs. 30,000/- per month per person
6	Graduate Engineer/ Diploma		1	5/10 Respectively	Project Planning/billing Engineer	Rs. 40,000/- per month per person
7	Graduate Engineer		1	5	PHE Services	Rs. 40,000/- per month per person
8	Graduate Electrical Engineer	Electrical.....	1	12	Deputy Project Manager - Electrical	Rs. 60,000/- per Month per person
9	Graduate Mechanical Engineer		1	12	Deputy Project Manager -Mechanical	Rs. 60,000/- per month per person
10	Graduate Engineer/ Diploma Engineer		3	5 or 10 respectively	Project/Site Engineer	Rs. 40,000/- per month per person
11	Graduate Engineer/ Diploma		1	5/10 Respectively	Project Planning/billing Engineer	Rs. 40,000/- per month per person
12	Graduate Architect		1	5	Site Architect	Rs. 40,000/- per month per person
13	Graduate Engineer/ Diploma		1	5/10 Respectively	Quality Engineer Electrical & Mechanical Works	Rs. 40,000/- per month per person
14	Safety Engineer/ Graduate		1	5	Ensuring Safety measure for construction activity	Rs. 40,000/- per month per person
15	Graduate	Environmental	1	6	Green Building Consultant	Rs. 40,000/- per month per person

Note:

- 1. In addition to above, the specialized firm engaged by the main contractor for Pre-Cast RCC work, shall deploy sufficient number of experienced engineers/ technicians and workforce along with T&P required for erection of Pre-Cast members. Since the casting, transportation and erection of Pre-Cast members is a specialized job, the main contractor shall ensure that the pre-cast specialized firm deploy sufficient workforce. For slow progress and any untoward incident, the main contractor shall be responsible.**
- 2. As the work is majorly involved with Precast RCC elements casting at factory, transportation of those from factory to site and its installation at site, hence the deployment of personnel at Factory shall be made by the contractor in such to meet the process and ensure the quality requirements as directed by the Engineer-in-charge.**
3. The requirement shown above is the peak requirement. Deployment of personnel as per actual need shall be made by the Contractor as directed by Engineer- in- Charge.
4. The specialized technical staff for execution for component such as plumbing, water proofing, fire fighting, Electrical, HVAC, LAN, Wi-Fi Networking, Acoustic, landscaping etc. shall be deployed as per the requirement of work.
5. Assistant Engineers retired from Government services who are holding Diploma will be treated at par with Graduate Engineers. Diploma holder with minimum 10-years relevant experience with a reputed construction company can be treated at par with Graduate Engineers for the purpose of such deployment subject to that such diploma holder should not exceed 50% of requirement of degree engineers.
6. The bidder shall submit a certificate of employment of the technical representative(s) (in the form of copy of Form – 16 or CPF deduction issued to the Engineers employed by him) along with every account bill / final bill and shall produce evidence of regular physical availability of such engineers on the above project whenever required by the Engineer – in – charge.

Clause 38**Applicable as given below**

	Schedule/statement for determining theoretical quantity of cement & bitumen based on Delhi Schedule of Rates.	Delhi Schedule of Rates 2021 with amendments up to the date of submission of bid.
	Variations permissible on theoretical quantities.	
	Cement	
	Cement for works with estimated cost put to tender more than Rs. 5 Lakh.	2% Plus/Minus
	Bitumen for all works.	2.5% Plus only and nil on minus side.
	Steel reinforcement and structural steel	2% Plus/minus side sections for each diameter, section and category.
	All other materials	Nil

RECOVERY RATES FOR QUANTITIES BEYOND PERMISSIBLE VARIATION

S. No	Description of item	Rates in figure and words at which recovery shall be made from the contractor	
		Excess beyond permissible variation	Less use beyond the permissible variation
1	Cement (PPC)	NIL	Not Permitted
2	Reinforcement bars(TMT) (a)Primary Producer	NIL	Not Permitted
3	Structural steel	NIL	Not Permitted

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Volume 1:: Section 1

NIT FORM & ACCEPTANCE

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NIT FORM

Indian Institute of Technology Hyderabad

ENGINEERING, PROCUREMENT AND CONSTRUCTION (EPC) (Turn Key) Bid (Mode – I)

(A) Tender for the work of:- *Construction of precast 2Nos Faculty Housing Tower (G+12), 3Nos Staff Housing Towers (G+12) and 3Nos Hostel Blocks (G+6) RCC Structures at IIT Hyderabad, Kandi, Sangareddy.*

- (i) To be submitted online by 15:00 Hours on **06-10-2022**
- (ii) To be opened in presence of tenderers who may be present at 15.30 hours on **06-10-2022** in the office of The Executive Engineer, Construction and Maintenance Division, IIT Hyderabad.

BID

I/We have read and examined the notice inviting bid, schedule-A, B, C, D, E & F, Specifications applicable, Drawings & Designs, General Rules and Directions, Conditions of Contract clauses of contract, Special conditions, Bill of Quantities & other documents and Rules referred to in the conditions of contract and all other contents in the bid document for the work.

I/We hereby bid for the execution of the work specified for the President of India **within the time specified in Schedule F, user requirement and approved drawings and** accordance in all respect with the specifications, designs, drawing and instructions in writing referred to in Rule-1 of General Rules and Directions and in Clause 11 of the Conditions of contract of 2019 with amendments up to the last date of submission of bids and with such materials as are provided for, by, and in respect of accordance with, such conditions so far as applicable.

We agree to keep the bid open for **Ninety (90) days** from the date of opening of technical bid and not to make any modification in its terms and conditions.

Earnest money **Rs. 2,71,85,600/-** in the shape of bank guarantee issued by[*name of the scheduled bank*] is submitted. If I/We, fail to furnish the prescribed performance guarantee within prescribed period, I/We agree that the said Director 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 Director or the successors in office shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the said performance guarantee absolutely, the said performance guarantee shall be a guarantee to execute all the works referred to in the bid documents upon the terms and conditions contained or referred to those in excess of that limit at the rates to be determined in accordance with the provision contained in clause 12.2 and 12.3 (as modified) of the bid form.

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

I/we undertake and confirm that eligible similar work(s) has/have not been got executed through another agency on back to back basis. Further that, if such a violation comes to the notice of Department, then I/we shall be debarred for bidding in IIT Hyderabad in future forever. Also, if such a violation comes to the notice of Department before date of start of work, the Engineer-in-charge shall be free to forfeit the entire amount of Earnest Money Deposited/Performance Guarantee.

I/We hereby declare that I/We shall treat the bid 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 safety of the State.

Dated:**.....

Signature of Contractor**

Witness: **

Address: **

Postal Address **

Occupation: **

[To be filled by Bidder]**

ACCEPTANCE

The above tender (as modified by you as provided in the letters mentioned hereunder) is accepted by me for and on behalf of the President of India for a sum of Rs.....(Rupee.....).

The letters referred to below shall form part of this contract agreement:-

(a) *

(b) *

For & on behalf of Director, IIT Hyderabad

Signature.....*

Dated:*

Designation.....*

* Blanks to be filled by EE

** To be filled by Contractor

Volume 1:: Section 2

Special Conditions of Contract

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1.0 GENERAL:

- 1.1. Special Conditions of Contract shall be read in conjunction with the General Conditions of Contract, Schedule of Quantities, specifications of work, approved drawings and any other documents forming part of this contract wherever the context so requires. The order of precedence of the above documents shall be interpreted as per General Conditions of Contract.
- 1.2. Notwithstanding the sub-division of the document into these separate sections and volumes, every part of each shall be deemed to be supplementary of every other part and shall be read with and into the contract so far as it may be practicable to do so.
- 1.3. The materials, design and workmanship shall satisfy the relevant Indian Standards (Latest), the job specifications contained herein and other national / international codes (Latest) referred to. Where the job specifications, stipulate requirements in addition to those contained in the standard codes and specifications, these additional requirements shall also be satisfied. In the absence of any Standards/Specifications/Codes of practices for detailed specifications covering any part of the work covered in this tender, Contractor shall ensure that the work is executed as per the best and sound engineering practices and/or as per the instructions/ directions of Engineer- in-Charge. The decision of EIC as regards the specification to be adopted and their interpretation and the mode of execution of work shall be final and binding on the Contractor and no claim whatsoever shall be entertained on this account.
- 1.4. The Contractor shall execute the whole and every part of the Works in the most professional and workman-like manner and both as regards materials and in other respects in strict accordance with specifications and latest Indian and international codes.
- 1.5. Excavated good earth declared surplus or otherwise shall be disposed of at designated locations as per the directions of the Engineer – in - charge, which shall be different from the disposal site for black cotton soil.
- 1.6. Wherever the Black-cotton soil encountered in foundations of proposed structures and Road works shall be removed the soil in total for the designated designed depths and excavate further more depth of minimum 800mm and said black cotton soil shall be removed and refilled bottom layer of 500mm depth with good moorum soil and then further 300mm depth layer with crushed stone sand (CSS).
- 1.7. For soil required for re-filling, if sufficient space is not available for stacking at site of excavation, the Contractor shall make his own arrangements for transporting and stacking the earth elsewhere and then bring it back for re-filling. Nothing extra shall be paid on this account for to and fro carriage.
- 1.8. Disposal of surplus excavated earth including mud, liquid mud, dismantled RCC, dismantled brick work etc. shall be made only in the dumping yard approved by local authority. It will be the responsibility of the contractor to get the permission for dumping yard from local authority as required. If any royalty /fees is payable to local authority, such royalty / fees shall also be borne by the contractor. Disposal shall be carried out strictly as per the regulations of local authority. However, the above materials shall not be removed out of owner's premises without prior written authorization of EIC.
- 1.9. The Contractor shall put in place a Vehicle Wash area to ensure that the vehicles exiting the construction work site are free from sediment to avoid dirtying the public roads.
- 1.10. The Contractor shall carefully protect and preserve all bench marks, site details, pegs and other things used in the setting out of the building for Construction. All preliminary works

such as establishment of a set of bench marks, permanent DGPS, Total Station/theodolite stations, center line pillars, etc., including required materials, tools, plants, equipment, labour, etc. for performing such functions necessary and ancillary there to for the commencement and during the progress of the work and till physical completion of the work shall be carried out by the Contractor at his own cost. It shall be Contractor's responsibility to shift the existing benchmark to his work site to set out the necessary control points and alignment of the various works. The Contractor shall also provide DGPS instrument with other required precision Survey Instruments as per site requirement and/or as directed by EIC. The work of setting out shall be deemed to be a part of general works preparatory to the execution of the work and no separate payment shall be made for the same.

- 1.11. The work will be carried out in accordance with the architectural drawings and structural drawings as approved by the Engineer-in-Charge. The structural and architectural drawings shall have to be properly correlated before executing the work. Working drawings will be submitted by the contractor timely for progressive work and enable EIC to approve the drawings.
- 1.12. Shop drawings giving complete information for the fabrication of the component parts including the location, type, size, length and details of connections shall be prepared well in advance by the contractor before the actual fabrication and got approved from the respective consultants, who are appointed and subsequent approvals of Engineer-in-Charge. Delay in submission of the drawings by the contractor causing consequent delay in approval by the respective consultant shall not absolve the contractor of his responsibilities.
- 1.13. As the Contract is in EPC Mode-1, the Contractor have to supply designs and shop drawings and which got to be approved by respective consultants or Indian Institute of Technology or any other Institute of repute for the particular items as specified and approved subsequently by Engineer-in-charge, and all costs towards the same, including charges for approvals by third party shall be deemed to have been included in the quoted rates.
- 1.14. Approved Plumbing drawings shall be followed as closely as actual construction permits. Any deviations made shall be in conformity with the structural, architectural and other services drawings. Detailed drawings shall be prepared by the Contractor and got approved by EIC well in advance prior to start of the relevant item of work.
- 1.15. Architectural drawings shall take precedence over plumbing or other services drawings in respect of overall dimensions unless and otherwise directed by EIC.
- 1.16. All temporary works, ancillary works, enabling works, including dewatering of surface and subsoil water, preparation and maintenance of temporary drains at the work site, preparation and maintenance of approaches to working areas, wherever required, for execution of the work, shall be the responsibility of the Contractor and all costs towards the same shall be deemed to have been included in the quoted prices.
- 1.17. The Contractor shall, at his own expense and without extra charges, make provision for all pumping, dewatering, dredging or bailing out water, if necessary, irrespective of the source of water. The water so pumped out shall be discharged as per local byelaws and as approved by the Engineer-in-charge. The Contractor shall also take all necessary precautions in diverting channels and in discharging the drained water as not to cause damage to the works, crops or any other property within/outside the plot. Excavated area for the basement/ foundation trenches shall be kept free from water while all the works below Ground level are in progress. Nothing extra shall be paid on this account in terms of time and cost.

- 1.18. The Contractor shall at his own expense and without extra charges, take all precautions such as shoring for all depths or any other arrangement as approved by Engineer-in-Charge for ensuring that there shall be no sliding / collapsing of the excavated earth. The measurement for excavation shall be regulated as per the provisions of the CPWD / MOHTH specification and Nothing extra shall be payable on account of shoring / other arrangements.
- 1.19. Earth work in excavation and filling for, building works shall be governed under provisions of CPWD Specifications and Delhi Analysis of Rates (DAR), Master Plan road works and any other works not related to building works shall be governed by MORTH Specifications and MORTH Standard Data Book for Analysis of Rates.
- 1.20. Further contractor shall take all necessary precautions to protect and safe guard the foundation of the adjacent building / Structure / Overhead/Underground utilities. Nothing extra shall be payable on this account.
- 1.21. Contractor shall supply additional quantities of ceramic/ vitrified tiles used in the works. Minimum 10 sqm for each type and category shall be provided for using at a later stage during maintenance, so that the uniformity of colour is maintained. Nothing extra shall be payable for this supply.
- 1.22. For the building items covered by CPWD Specifications shall be executed accordingly. Where it is felt that the CPWD Specifications concerned does not reflect the full scope of work under any item, those items shall be executed as per the Indian Standards or any other relevant Specifications.
- 1.23. Should work be suspended by reason of rain, strike, lockouts or any other cause, Contractor shall take all precautionary measures for the protection of works and at his own cost and shall make good any damage arising from any of these causes to satisfaction of EIC.
- 1.24. Work shall normally be done in a single shift/day. However, if the work is required to be executed in more than one shift in a day for meeting the time lines, the Contractor with prior approval of the Engineer - in -charge, shall have to make necessary arrangements for the same and all costs towards the same shall be deemed to have been included in the quoted rates.
- 1.25. Defect liability period shall start from the date of taking over of sectional completion of building after its completion in all respects as mentioned in Schedule-F@clause-5 and as per the scope of the contract by the Engineer – in - charge.
- 1.26. After completion of the specific building as mentioned in Schedule-F of the contract, the building shall be taken over by the Institute and put to use. To ensure safety of the occupants and prevent from dust & debris, the contractor has to hard barricade the on-going buildings being constructed by them nearby.
- 1.27. Labour Camp:

IITH shall not permit the contractor to set up labour camp within its boundary. Contractor shall make his own arrangements to set up labour camps. The facilities like dwelling units, water supply, lighting arrangement, drainage and sanitation as stipulated in Clause-19H of the contract shall be arranged by the Contractor and all costs towards the same shall be deemed to have been included in the quoted rates.

The Contractor shall put in place an arrangement for controlled entry and exit of labourers / workers / technicians with Gate Passes or Identification Badges with Colour photographs individually authorized by the Contractor or through Bio-metric system at entry & exit gates as required and all costs towards the same shall be deemed to have been included in the quoted prices.

1.27 Precision Works:

Precast Wall and Slab installations are precision works. Contractor shall ensure utmost precision in location of dowel bars, slots, pockets and the like with (+/-) 1 mm tolerance.

1.28 Maintenance of Register of Tests: -

All the registers of tests carried out at Construction Site or in outside laboratories shall be maintained by the contractor which shall be issued to the contractor by Engineer-in-charge. Contractor shall be responsible for safe custody of all the test registers.

1.29. Method Statement:

The contractor shall submit a 'Methods statement' for the approval of the EIC soon after the award of work to him. The 'Methods statement' is a statement by which the construction procedures for important activities of construction are stated, checked, and approved. The 'Methods statement', should have a description of the item with elaborate procedures in steps to implement the same, the specifications of the materials involved, their testing and acceptance criteria, equipment to be used, precautions to be taken, mode of measurement, etc.

1.30. Floors & Levels:

- a) Floor 1 shall be the lowest floor above the average ground level of the main building to be constructed at site. The Floor above Floor 1 shall be numbered in sequence as Floor 2, Floor 3 and so on. The number shall increase upwards.
- b) Floor Level - Top level of structural slab shall be the floor level.
- c) Plinth Level - Floor 1 level shall be the plinth level.

1.31. Lowest Bid.

The Tender is divided in to eight parts, which is as per building/tower-wise. The sum total of the quoted rates for the eight parts shall be calculated for deciding the lowest tenderer for the purpose of awarding the work.

1.32. AMENDMENT OF TENDER DOCUMENT

Before the deadline for submission of tenders, the Tender Document may be modified by Indian Institute of Technology Hyderabad by issue of addenda/ corrigendum. Issue of addenda/ corrigenda will however be stopped 7 days prior to the deadline for submission of tenders as finally stipulated.

Addendum/ corrigendum, if any, will be hosted on e-procurement portal of Ministry of Education and IITH Website only and shall become a part of the tender document. All Tenderers are advised to see the website for addendum/ corrigendum to the tender document which may be uploaded up to 7 days prior to the deadline for submission of Tender as finally stipulated.

To give prospective tenderer reasonable time in which to take the addenda/ corrigenda into account in preparing their tenders, extension of the deadline for submission of tenders may be given as considered necessary by IITH.

2.0 WORK PROGRAMME:

2.1 The Contractor shall, within 15 days after the date of award of the work, submit his detailed work programme preferably in Microsoft Project (Level-3), detailed Project quality plan for works executable at site and also at manufacturer's place, safety plan, for the approval of the Engineer in - charge, which shall clearly set out his proposed schedule for the whole of the Works, the time for completing the major sections of the Works and his schedule for mobilizing the materials and equipment necessary for implementing the Works in a timely cohesive and efficient manner. The Contractor shall submit the above Resource Mobilization Plan on the basis of site /region prevalent labour constants/ productivity factors and separately a Project Material Procurement Plan clearly mentioning the procurement strategy for long lead items.

2.2 Slab Cycle Requirements:

The Contractor shall plan and design Concrete Strength at various stages of work commensurate to the slab cycle requirements through submitted Precast Elements casting/ erection timelines which shall be the sole responsibility of the Contractor and this shall not absolve him of his responsibilities despite approvals accorded by EIC. The quoted rate shall be deemed to include the cost of the above.

2.3 Project Review Meetings:

The contractor, immediately on award of work shall submit details of his key personnel to be engaged for the work at site. In addition, he shall furnish the Engineer-in-Charge detailed organogram involved with the work.

The Contractor shall present the programme and status at various review meetings as required.

i) Weekly Review Meetings: Shall be attended by Local Team headed by Project -in-Charge.

Agenda a) Weekly programme v/ s actual achieved in the past week and programme for next week.

b) Remedial Actions and hold up analysis.

c) Client query approval.

ii) Monthly Review meetings: Shall be attended by Project -in- Charge and the Management Representative who can take independent decisions.

Agenda a) Progress Status/ Statistics.

b) Completion Outlook.

c) Major hold ups / slippages.

d) Assistance required.

e) Critical issues.

f) Client query/ approval.

g) Anticipated cash flow requirement for next two months

3.0 WATER AND POWER

3.1 Water: Contractor shall make his own arrangement for water, required and suitable for construction. This shall also include arrangement of adequate water for hydro-tests of liquid/water retaining structures or any other installations as directed by EIC.

3.2 Power: Contractor shall make his own arrangements for power required for construction of the Project. Alternately, he may apply for and arrange power at the project site. All associated activities for obtaining necessary approvals and sanctions for construction power shall be coordinated by the contractor, the cost of which shall be deemed to be included in the quoted rates under various items of work of the "Schedule of Building Wise Sub Heads (i.e. Schedule of Items)". However, the EIC shall provide all necessary documents / drawings for submission to the TSCPDC/ TRANSCO. All installations / fixtures & fittings / cabling for construction power shall be in the scope of the contractor without any additional cost to the Institute. The delay on part of the Contractor in timely getting the statutory clearances and establishing required installation for adequate power supply shall not be accounted for extension of time and also shall not absolve him of Contractual responsibilities.

3.3 If the Institute provides water and electricity, the cost for such facility will be recovered from the bills of the contractor at the prevailing rates of local Government bodies as per actuals.

4.0 MEASUREMENTS, BILLING & TERMS OF PAYMENT:

4.1 All works shall be measured as per the Building wise schedules and Sub-Head wise payment % Breakup provided on actual works done as per the terms and conditions of the tender document.

4.2 Contractor shall submit computerized bills as per Clause 6A of GCC.

4.3 Terms of Payment: Following shall be the terms of payments for the subject works: -

The above progressive payments are subject to deduction towards income tax and other recoveries as applicable as per the terms of the contract.

Note: The contractor shall prepare and submit a consolidated Bill for the Project. However, separate abstract shall be submitted for each subhead.

5.0 PROJECT OFFICE ACCOMMODATION:

The contractor shall provide, erect and maintain at his own cost separate temporary water tight, Puf insulated air-conditioned office accommodation in the form of three (3) Nos. Porta Cabins each of size 20' X 10' at designated locations for the Engineer- in-charge with the following minimum facilities in each cabin. These shall be available till handing over of the project.

Toilet facility : 1 No. portable for each cabin

Modular Work Stations : 3 Nos. in each cabin

Executive Chairs : 3 Nos. shoulder rest

Visitors Chairs : 6 Nos.

Overhead Storage Racks : All along the walls

Adequate number of Power plugs

White Board with Markers : 1 No. in each cabin

Pin-Up Display board of size as required

Free Drinking water, stabilized power and lighting as required for the duration of the Project.

Janitorial and Housekeeping services

The contractor has to relocate the Porta Cabins if required as per the exigencies of the work and as directed by EIC without any extra cost. After completion of the Project the

Contractor shall take away this material and the site shall be cleaned free from all construction debris.

In addition to the above, the contractor shall provide Technical Manpower like Civil Supervisors 2 Nos, Electrical Supervisor 1 No and Computer operator 1 No for day to day activities at the disposal of Engineer-in-Charge. In the event of contractor failing to arrange the above mentioned technical personnel, the Engineer-in-charge shall make alternate arrangement at the cost of contractor.

6.0 INSPECTION VEHICLES:

Contractor shall, at his own cost, deploy for the exclusive use of the EIC and his team, 3 (Three) nos SFDAN diesel driven inspection vehicles, Four (4) Passenger capacity, Model not older than year 2021 with drivers and fuel with average monthly ceiling of 2500Km each within 15 days of issue of award letter. The operation and maintenance cost of the vehicles has to borne by the contractor and the Vehicles are to be at the exclusive disposal of EIC till the completion of the whole Project. In the event contractor fails to arrange the vehicles in satisfactory condition, the Engineer-in-charge shall make alternate arrangement at the cost of the contractor.

7.0 CONTRACT DRAWINGS

The contractor shall keep mandatorily one copy each of approved drawings, conditions of contract, specifications, instructions and schedule of quantities at the site of works available for reference by any authorized representative of Owner/ Engineer- in-charge, at all times during the progress of the works. The drawings shall be displayed and arranged as directed by the Engineer- in- Charge.

8.0 WORK TO BE CARRIED OUT BY SPECIALISED AGENCIES:

8.1 Following specialized works should be got executed only through agencies specialized in the field and the contractor shall be required to submit the details of such agencies to the Engineer-in-Charge and obtain necessary approval prior to their engagement:-

- Pre-Cast Concrete Elements Walls, Slabs, Columns, Beams, Fins etc.
- Anti-termite Treatment
- Water Proofing Work
- Fire-fighting / fire suppression / fire alarm systems
- HVAC systems
- Lifts
- Diesel Generators
- Radiant Cooling System
- Thermal insulation
- Facade cleaning system and Facade cleaning.
- M/s. Godrej Metal Modular Customized Cup Boards, Wardrobes, Kitchen Modular etc.
- Cement fibre boards for hostel cupboards and for closing of radiant cooling system manifold installed at internal walls of Hostels and also for providing inside of external precast walls of all flat rooms of Faculty & Staff Housing and rooms of Hostels for encasing the thermal insulation boards, which is as specified.
- Plumbing with CPVC/HDPE/GI/Polypropylene pipes using advanced technology for jointing.
- Trenchless pipe works.
- Signage's
- uPVC doors and windows
- Granite Cladding
- Exposed Concrete Protective Coating, if any
- Specialized Shuttering, if any

8.2 The specialized agency should have successfully completed at least one work of similar nature.

8.3 The contractor shall submit the following details of the specialized agency before execution of work as per the Terms and conditions of the Contract for approval of EIC:

List of similar works carried out by the agency during the last five years along with the name of work, name and address of clients, year of execution, value of work done and brief specification of the work. The credentials for such completed works shall be obtained from the Project Manager / Executive Engineer concerned along with contact address.

8.4 Notwithstanding the approval of the Engineer-in-Charge for the specialized agencies, the services of the specialized agencies shall be removed wherever the Engineer-in-Charge is not satisfied with the performance of the specialized agency. Thereupon, the Contractor shall immediately arrange for an alternate specialized agency conforming to prescribed eligibility criteria. Nothing extra shall be payable on this account. Further, no extension of time shall be permissible on this account.

9.0 MOCK-UP

9.1 The concept of Mock Ups is to assess the performance parameters / quality standards specified for specified item/unit in the project. The main objective of the section is to address issues prior to construction to minimize disruption to the critical path of construction program and is as follows;

- Determine whether the contractor possesses required skill level necessary to construct the activity, assemblies or systems such that the as-built construction will satisfy specified requirement.
- To understand the sequence of operation and discuss alternative sequencing options if any.
- To assess the standard of workmanship and aesthetics to be replicated throughout the project.
- To recognize and resolve potential areas of conflict prior to the commencement of construction.

9.2 The Contractor shall prepare the full scale mock up at site for activity showing the following but not limited to:

- Flooring patterns, hardware, accessories, exterior windows (sill, corner, jamb), curtain walls, Doors, glazing works, External Facade systems, false ceiling, electrical and mechanical fixtures, wall system, Roof System etc.
- To determine the acceptable standard of workmanship, the Contractor shall execute a sample unit (one of each type decided by the Engineer-in-charge) completing all items of works and services such as walls, floors, roof, plastering, waterproofing, joinery including fittings, sanitary fittings, plumbing, electrification, painting, entire kitchen and bathroom fittings, doors, windows, wood works, cabinets, cupboards and pelmets etc. complete in all respects. The brands of various materials incorporated as well as finishes will be approved by the Engineer-in-charge. These will be guiding samples for future execution of the rest of the Units.

The contractor shall complete the mock-up unit and get it approved by Engineer in – charge before commencement of other works in that particular building. Details of

sample units are as under:

- One model Hostel room in a hostel building
- One Toilet block in a hostel building
- One flat including toilets and corridor in each type of Faculty Tower
- One flat including toilets and corridor in each type of Staff Tower

9.3 The contractor shall construct mock ups for the purpose of testing as given in the particular specification for the following items of work:

- uPVC 1 No. French Door and 1 No. Maximum size Window designed for 6th floor and above flats (FT1A & FT1B)
- uPVC 1 No. Maximum Window designed for 6th floor and above flats (ST1A)
- uPVC 1 No. French Door and 1 No. Maximum size window designed for 6th floor and above flats (ST2A & ST2B)
- Fire Doors
- Tests for Precast Elements required as per the relevant IS codes
- SS/Glass Railings
- Semi-unitized/ Unitized curtain glazing, if proposed to any building by Architect
- Any other mock-ups required as per the relevant IS codes for the items demanded for the proposal of Architect.

9.4 Contractor shall build mock-ups for each form of construction and finish required, including exposed concrete / pre-cast concrete elements / murals / Self Compacting Concrete using materials indicated for the completed work as per given specifications.

9.5 Mock up shall be constructed by the same personnel who will be constructing actual construction of the said activity or system on the project along with acting site supervisors, key personnel during actual construction.

9.6 Contractor shall furnish the Mock up schedule taking care to ensure that sufficient time period is available between erection / installation of the mock up and actual execution of that item of work to enable EIC to incorporate changes and take corrective actions if any.

9.7 The Contractor shall establish the acceptable quality of workmanship as desired by the EIC for each of the items of the Works and their elements by preparing specimens and mock ups as directed by the EIC.

9.8 Nothing extra shall be payable for preparing the specimens and the mock ups. No claims of any kind whatsoever including the claim of extension of time will be entertained due to the incorporation of the requirement.

9.9 In case of non-approval of the mock-ups by EIC on account of quality issues or other reasons attributable to the Contractor, the mock ups shall be rebuilt up by the Contractor at no extra cost and time to EIC.

10.0 MATERIALS AND SAMPLES:

The Contractor shall arrange a sample room for displaying approved samples which shall be maintained till the completion of the work. No payment will be made to the contractor for the samples procured.

The sample approval shall be given in writing by EIC within 15 days after submission of the sample with supporting catalogues and other documents as required by EIC.

The delay in submittal of the samples by the Contractor and further cascading delay in subsequent approvals and procurement shall not attract any extra cost and time to the Contract.

11.0 RECOMMENDED MAKE OF MATERIALS:

11.1 A list of recommended makes of materials is placed at Annexure:1

11.2 The order of preference amongst the various products/materials shall be as follows:

The products/materials shall be as per the Brand specified in the Annexure:1
If the Brand is not specified, then the products/material shall be ISI marked and the same shall be got approved by the Engineer- in-Charge before execution.

If ISI marked product/material is not available, the same shall be as approved by the Engineer-in-Charge before execution.

11.3 In case of natural products such as Kota stone, Marble, Granite etc.,

- a) The stones used shall be of premium grade and they shall be homogenous in colour with consistency in pattern, texture, tone, marking and colour. No discolouration, spots, fissures or cracks and pocked surfaces shall be allowed.

Here it is difficult to guarantee uniformity in colour and other properties, contractor shall make all efforts to match the colour, shade, texture of the product with the approved sample. If in the opinion of the Engineer-in- Charge there is significant variation in properties, the Engineer-in-Charge shall direct the contractor to remove the same from the site immediately and replace with products matching the approved sample within reasonable period. The decision of Engineer-in-Charge shall be final and binding. Nothing extra shall be paid on this account.

12.0 MEDIA RELEASES

The Contractor shall not issue any information, publication, document or article for publication concerning the project to the media without the express approval of Indian Institute of Technology Hyderabad.

13.0 COMPLETION CERTIFICATES/NOC FROM LOCAL STATUTORY BODIES

Contractor has to arrange at his own cost building/ work completion certificates or NOCs if required to be obtained, from the local statutory bodies of central and state govt. such as electrical, safety, Fire authority, Chief Controller of Explosives (CCOE),CEA etc. Any fees required for obtaining such NOCs shall be paid by IITH on production of relevant depository challans/ receipts from such Govt. authorities.

The application on behalf of IITH for submission to relevant authorities along with copies of required certificates complete in all respects shall be prepared and submitted by the Contractor well ahead of time so that the actual construction / commissioning of the work is not delayed for want of the approval / inspection by concerned authorities.

The inspection of the works by the authorities shall be arranged by the Contractor and necessary co-ordination and liaison work in this respect shall be the responsibility of the Contractor.

14.0 COMPLETION DRAWINGS & STANDARD MEASUREMENT BOOK (SMB)

14.1 During the execution of the Works a set of drawings shall be retained in the Contractor's Site Offices for the exclusive purpose of recording changes made to the Work as the construction proceeds. On completion of the Work, the Contractor shall submit required details and "Mark- up" of changes if any in all drawings of the project to the EIC. The Contractor shall render all required assistance in getting the "AS BUILT" drawings prepared by the Engineer-in-Charge. These drawings shall include and show all the changes / deviations made from the working drawings during the course of construction and also the other details as called for by the Engineer-in-Charge.

14.2 Along with the completion drawings the Contractor shall also prepare and submit to the Engineer-in-Charge the Standard Measurement Book (SMB) in the form of a bound book in two sets and a soft copy of the same in Excel. SMB shall incorporate the standard measurements of the all types of Painting works as per the completion / as built drawings in modules finalized in consultation with the Engineer-in-Charge. All the above to be done at no extra cost.

15.0 TOOLS, PLANTS AND MACHINERY

The Contractor shall provide and install at site, T &P as stipulated in Clause of the Contract. The deployment of T&P shall be planned as per work requirement to suit the nature, quantum and speed of the work for lifting/ hoisting construction materials/equipment etc. The T&P shall be maintained in good working condition throughout the progress of work. All adequate precaution regarding formal upkeep of valid Statutory/ Safety credentials of major construction equipment as directed by EIC, their installation, operation, maintenance, materials etc., shall be taken care of. The operating staff to be deployed shall be properly qualified and adequately trained and experienced. All safety precautions shall be taken during the project duration, against possible accident. The Contractor shall deploy his representative to effectively enforce the safety rules and regulations in this regard. Nothing extra shall be payable on this account for the above. The list of T&P is as follows:

S. No.	Name of Equipment
1	Tower crane
2	Concrete Batch Mix Plant capacity 18 cum per Hour (fully automatic with computer control) may be installed at construction site as per the requirement to meet the progress and timelines of the completion of work.
3.	Concrete Batch Mix Plant Capacity either 60 or 30 cum cum per hour (fully automatic with computer control) as desired shall be installed at factory for product of precast elements to meet the progress and timelines of the completion of work.
4	Production facility for Pre- cast Concrete elements with all required machinery etc.,
5	Heavy Duty High Head Static Concrete Pumps
6	Placer Booms
7	Transit Mixers
8	Telescopic cranes
9	MII welding machines
10	Builder Hoists
11	Material and Passenger lifts etc.

Construction equipment & Mechanization of construction activities:

The above list is only minimal and indicative. The contractor shall deploy all necessary tools and plants as per the requirement of the work.

The Contractor shall without prejudice to his overall responsibility to execute and complete the work as per specifications and Time Schedule, progressively deploy adequate equipment, and tools & tackles and augment the same as decided by Engineer-in-Charge depending on the exigencies of the work so as to suit the construction schedule.

The Contractor shall mechanize the construction activities to the maximum extent by deploying all necessary construction equipment/ machinery in adequate numbers and capacities.

16. CEMENT & STEEL:

16.1 For Cement and Steel and other materials, as prescribed, the quantities brought at site shall be entered in the respective material at site accounts and shall be treated as issued for maintenance of daily consumption.

The procurement of Cement and Reinforcement Steel, and, their issue and consumption shall be governed as per conditions laid down hereunder.

16.1.1 CEMENT

The Contractor shall procure 53 grade (Conforming to IS:8112) Ordinary Portland Cement, as required in the work, from reputed manufactures of cement, having a production- capacity of one million tonnes per annum or more, such as ACC, Ultratech, etc., as approved by Engineer-in-Charge. Samples of cement arranged by the Contractor shall be taken by the Engineer-in-Charge, and got tested in accordance with provisions of the relevant BIS codes. In case test results indicate that the cement arranged by the Contractor does not conform to the relevant BIS codes, the same shall stand rejected and shall be removed from the site by the Contractor at his own cost forthwith. Procurement of cement of other type and grade shall be on prior approval of the EIC for specific area of application. However, Portland Pozzolana Cement (PPC) may be allowed to use for non-structural cast-in-situ items of work.

The Cement shall be brought at site in bulk supply as per requirement of work or as decided by the Engineer-in-Charge.

The cement godowns of the capacity to store appropriate quantity of cement as decided by the Engineer-in-Charge shall be constructed by the Contractor at site of work for which no extra payment shall be made. The Contractor shall facilitate the inspection of the cement godowns by the Engineer-in-Charge at any time.

The Contractor shall mandatorily maintain records of the batch sheets in hard copies of all concrete supply on daily basis for monitoring the actual consumption of cement during complete tenure of the Project

Contractor may be allowed to use mineral admixtures as per the approved mix design and in line with relevant IS Codes keeping desired strengths of the concrete and timelines of the buildings/project intact.

16.1.2 STEEL

Reinforcement steel shall mean Fe-500D unless otherwise specified. The Contractor shall procure steel reinforcement TMT bars (of Fe 500 D grade having elongation ratio more than 14.5%) conforming to IS: 1786-2008 or latest / Structural steel conforming to IS:2062, from main producers of Steel like SAIL, TISCO etc., or as approved by the Engineer-in-Charge. The Contractor shall have to obtain and furnish test certificates to the Engineer-in-Charge in respect of all supplies of steel brought by him to the site of work. Samples shall also be taken and tested by the Engineer-in-Charge. In case the test results indicate that the steel arranged by the Contractor does not conform to the specification as above, the same shall stand rejected and shall be removed from the site of work forthwith

The structural steel, reinforcement steel shall be stored by the Contractor at site of work strictly on hard elevated bed or wooden sleepers enclosed within demarcated area (fabrication yard, reinforcement yard) in such a way as to prevent distortion, corrosion and nothing extra shall be paid on this account. Bars of different sizes (diameters) and lengths shall be stored separately away from the scraps to facilitate easy counting and checking.

Coefficient of weight i.e. the weight per unit length of the steel procured by the Contractor shall be ascertained at site before using it and certified by the Engineer-in-Charge. For this coefficient indicated in CPWD Specifications or any other BIS standards shall be adopted. The standard sectional weights referred to in standard table of the CPWD specifications are to be considered for conversion of length of various sizes of steel Reinforcement bars into weight and as per clause 6.2 of IS 1786.

16.2 The actual issue and consumption of steel and cement for the items of the works at site shall be regulated and proper accounts maintained as provided in clause 10 of the contract. The Procurement and consumption of Steel and Cement for the production of Precast Elements at Factory shall be monitored by maintaining proper registers/invoices/DCs/MTCs in line with extent possible as per the clause 10 by the QA & QC team of the Contractor/Agency as deployed and which shall be monitored & verified by the Institute time to time. The theoretical consumption of steel and cement shall be worked out as per procedure prescribed in clause 38 of the contract and shall be governed by conditions laid therein.

16.3 Steel and Cement brought to site and remaining unused shall not be removed from site without the written permission of the Engineer-in-Charge

17.0 ITEMS OP WORK REQUIRING PERFORMANCE GUARANTEE:

The following items of works require submission of Performance guarantee bond:

- a) Water proofing treatment systems
- b) uPVC Windows and Doors
- c) M/s. Godrej Customized Metal Modular Cub Boards, Ward Robes, Modular Kitchens etc.

For the above works, the Contractor shall give a guarantee to the effect that the work shall remain structurally stable and shall guarantee against faulty design, workmanship, fabrication, erecting, installation, leakages etc. including defective material, if any. The Contractor shall furnish a Guarantee Bond, as per prescribed format. The Guarantee Period shall be for 5 (Five)/ 10(Ten) years as specified in Technical Specifications of concerned item after completion of defect liability period.

18.0 REPORTS TO BE SUBMITTED

The contractor shall prepare and submit monthly progress report (including progress photographs) for the month to the EIC in three copies within 7 days of the following/next month. Reporting shall continue until the contractor has completed all works including the outstanding work as on the completion date as stated in the taking over certificate for the works. Each report shall include but shall not be limited to the following:

- 18.1.1 The status of supply and delivery of major materials and Plant to be incorporated in the Works, and the supply of major items of the Contractor's construction plant;
- 18.1.2 Records of personnel and Contractor's equipment on site;
- 18.1.3 Activities executed/ achievements during the month.
- 18.1.4 copies of quality assurance documents, test results and certificates of materials;
- 18.1.5 Safety statistics, including details of any hazardous incidents and activities relating to environmental aspects and public relations; and
- 18.1.6 Comparisons of actual and planned progress, with details of any aspects which may jeopardize the completion in accordance with the Contract, and the measures being (or to be) adopted to overcome such aspects.
- 18.1.7 Areas of concern/ problems/hold ups & its impact and action plans. And any other reports sought by the EIC.

19.0 QUARRY MATERIALS

The Contractor shall be wholly responsible to identify the suitable sources for quarry materials required for the Works, such as earth, sand, stone, gravel, murrum, etc., and to make his own arrangements (within the contract price) for collection and transportation of the materials irrespective of the leads and lifts required. The party managing the quarry identified by the Contractor should have proper license from the Government of Telangana. All materials supplied by the Contractor shall satisfy the requirements set forth in the Specifications contained in this Bid and shall be subject to the approval of the EIC. The Contractor shall take this into account while offering his rates and no claims whatsoever shall be entertained for extra costs on this account. All the seignorage (royalty) charges, levies etc., payable to Government shall be paid by the Contractor and are deemed to be included in the quoted rates.

20.0 INTERFERENCE WITH TRAFFIC AND ADJOINING PROPERTIES/ BUILDINGS:

- 20.1 The Contractor shall prepare General Maintenance of Traffic Plan which will be subject to the approval of the EIC. In case any operation connected with the Works requires temporary diversion of the traffic, or obstruction or closure of any road, or any other 'right of way', the approval of the EIC and the respective competent authorities shall be obtained at least one week in advance.
- 20.2 The Contractor shall at all times during execution of the Works, ensure an uninterrupted flow of traffic/ students/ faculty/ Staff/occupants of completed buildings on the work locations.
- 20.3 The Contractor shall at all times during execution of the Works, provide convenient access to parts, steps, bridges or drives for all entrances to property abutting the work sites and maintain them clear, tidy and free from mud or objectionable matter.
- 20.4 If in order to avoid undue interference with the traffic and adjoining properties, the EIC instructs the Contractor to take special precautions or work within restricted Anne periods; the Contractor shall carry out the Works during such time and in such manner as directed by the EIC.

20.5 The Contractor shall not claim any extra cost or payment on account of all or any of the works specified in the above clauses 20.1 to 20.4.

21.0 CONTRACTOR TO CO-ORDINATE HIS WORK WITH OTHER CONTRACTORS:

Various other works may be progressing simultaneously in the project site. The Contractor shall co-ordinate with the other concerned Contractors and take into account the inter-relation with other works while planning his daily construction activities, so as to eliminate any hindrance to any work(s) and/or to avoid any damages to the work(s) already carried out by other Contractors. The Contractor shall co-ordinate with the other concerned Contractors for all such works as per the Engineer's directions at no extra cost and he shall provide unhindered access to the T&P and machinery of the other contractors as per the directions of EIC.

22.0 SHIFTING OF UTILITY LINES:

During the course of execution of the works under this contract, the contractor is bound to undertake shifting of any Utility line(s) that are required to complete the Works satisfactorily. However, the Institute reserves the option to get such work carried out by other agency, but this shall not relieve the Contractor of any of his responsibilities and obligations under this Contract implying that this shall not be treated as compensation event for extension of time unless otherwise consented by EIC.

23.0 MOBILISATION OF MEN, MATERIALS AND EQUIPMENTS:

All expenses towards mobilization at site and demobilization including bringing the equipment, work force, materials, dismantling the equipment, clearing the site etc. shall be deemed to be included in prices quoted and no separate payments on account of such expenses shall be entertained. the EIC shall have exclusive rights to accept or reject any material or equipment and also the manpower engaged by the Contractor during complete tenure of the Project. This can also lead to demobilization of the supervisory manpower including key persons of the Contractor/Specialized agency in case of their non-satisfactory performance.

24.0 LIGHTING & WATCH AND WARD:

24.1 The contractor shall at his own cost take all precautions to ensure safety of life and property by providing necessary barriers, area lighting, CCTV cameras with live feeding at the construction site and approaches, barrications, watchmen, necessary watch towers etc. during progress of work at all hours including night hours, if required, as directed by the Engineer-in-charge.

24.2 The Contractor shall be responsible for the watch and ward of the all construction premises and buildings, safety of all fittings and fixtures including sanitary and water supply fittings and fixtures provided by him against pilferage and breakage during the period of installation till handing over of all the works to IITH. Nothing extra shall be payable on this account.

25.0 DRAWINGS & DESIGN BASIS REPORTS(DBR):

Since the contract is on EPC mode, only concept drawings for the work are attached in the tender document. All other drawings shall be prepared by the contractor and got approved by the Engineer-in-Charge before execution. All drawings shall be made in Latest Version of AutoCAD and the Soft Copies on CDs and Six

Hard Copies of Prints (A0 size) of all “Approved Drawings” and “As Built” Drawings shall be supplied by the Contractor to the Engineer – in – charge at Free of cost as per the Approved Program.

Also, Contractor has to submit the Soft/Hard copies of Design Basis Reports(DBR) of the all Structural, MEP services etc., like as submitted by concerned consultants and which are approved by authorized certifiers.

26.0 APPLICABLE PERMITS:

- 26.1 The contractor(s) shall give to the Municipality, police and other authorities all necessary notices etc. that may be required by law and obtain all requisite licenses for temporary obstructions, enclosures etc. and pay all fee, taxes and charges which may be levied on account of these operations in executing the contract. He shall make good any damage to the adjoining property whether public or private and shall supply and maintain lights either for illumination or for cautioning the public at night
- 26.2 The Contractor shall ensure that applicable permits mandated by the local bodies are obtained as required under the Applicable Laws. An indicative but not exhaustive list of some of the applicable permits are mentioned below for the guidance of the Contractor.
- 26.3 Consequences on account of failure to obtain the mandatory permits shall be the sole responsibility of the contractor and no claim what so ever shall be entertained by the EIC. Any liability incurred by EIC on account of such failure shall be recovered from the amounts/ payments due to the Contractor.

- Permission of the State Government for extraction of boulders from quarry;
- Permission of Pollution Control Board for installation of crushers;
- License for use of explosives, if any required.
- Permission of the State Government for drawing water from river/reservoir;
- License from Inspector of factories or other competent authority for setting up Batching Plant;
- Clearance of Pollution Control Board for setting up Batching Plant;
- Clearance of Pollution Control Board for Asphalt Plant;
- Clearance of Pollution Control Board for installation of diesel generator sets;
- Fire safety clearance from fire authorities;
- Permission of State Government for cutting / relocation of existing trees;
- Permit for employing unskilled/ semiskilled labour during day/night;
- Permit for dismantling/ reconstruction/ underpinning/ strengthening of affected structures, disposal of solid waste / excess material or soil, setting up of temporary camp on government/ private/leased land;
- Clearance for any urban structure affecting the landscape/ environment from the concerned authority;
- Permission from Archaeological Survey of India for construction of any structure within the prescribed radius of protected monuments;
- Permissions from the public utilities for diversion of utilities including reinstatement/reconstruction to original specifications;
- Approvals for electric supply/ distributions;
- Approval of Traffic Police for diversions and running of vehicles on specified routes; and
- Any other permits or clearance required under the Applicable laws.

27.0 ADDITIONAL/EXTRA WORKS:

IITH reserves the right to execute any additional works/extra works, during the execution of work, either by themselves or by appointing any other agency, even though such works are incidental to and necessary for the completion of works awarded to the Contractor.

28.0 QUALITY ASSURANCE:

Detailed quality assurance programme to be followed for the execution of Contract under various divisions of works will be mutually discussed and agreed to. The Contractor shall establish document and maintain an effective quality assurance systems in line with CPWD Quality Assurance Manual for Building Works 2022 and Quality Assurance Policy & Check List for E& M services vide CPWD CSQ(E) Lr.No. 51(4)/CE(E) CSQ/2018/252, dtd 30.01.2018 and also as outlined in other recognized codes.

Quality Assurance System plans/procedures of the Contractor shall be furnished in the form of a QA manual. This document should cover details of the personnel responsible for the quality assurance, plans or procedures to be followed for quality control in respect of all the activities envisaged in the construction works. The quality assurance system should indicate organizational approach for quality control and quality assurance of the construction activities, at all stages of work at site.

IITH or their representative or any 3rd party for QA & QC approved by IITH shall reserve the right to inspect/witness, review any or all stages of work at site as deemed necessary for quality assurance and / or timely completion of the work.

The Contractor has to ensure the deployment of quality Assurance and Quality Control Engineer(s) depending upon the quantum of work. This QA/QC group shall be fully responsible to carry out the work as per standards and all codes' requirements. In case EIC feels that Contractor's QA/ QC Engineer(s) are insufficient, Contractor has to deploy other experienced Engineer(s) as per site requirement and to the full satisfaction of EIC.

29.0 INSURANCE:

Without limiting the Contractor's obligations and responsibilities stated elsewhere in the Contract, the Contractor shall at his own cost arrange, secure and maintain insurance in the joint names of IITH and the contractor with any of the subsidiary of the General Insurance Corporation of India in such a manner that IITH and the contractor are covered for all time during the period of contract i.e. the time period allowed for completion of work, extended period and the defect liability period. The insurance shall be effected in accordance with terms approved by IITH and the contractor shall submit the insurance policies to the Engineer-In-Charge within 15 (Fifteen) days of signing of the agreement along with the receipt of premium. The contractor shall timely pay and submit the receipts of payment of premiums for extensions of policies, if any. The insurance shall cover the following: -

30.0 CONTRACTOR'S ALL RISKS INSURANCE:

The contractor shall insure the work for a sum equivalent to the Contract value or such additional sums as specified and the interests of Indian Institute of Technology Hyderabad against ALL RISKS claims, proceedings, loss or damages, costs, charges and expenses from whatsoever cause arising out of OP in consequence of the execution and maintenance of the work for which the contractor is responsible under the contract.

31.0 Workman Compensation & Employers Liability Insurance:

This insurance shall be effected for all the contractor's employees engaged in the performance of the contract. IITH shall not be liable in respect of any damages or compensation payable at law in respect of or in consequence of any accident or injury to any workman or any other person in the employment of the contractor and the contractor shall indemnify and keep indemnified the Indian Institute of Technology Hyderabad against all such damages and compensation and against all claims, demands, proceedings, costs, charges and expenses, whatsoever in respect or in relation thereof.

- 31.1 Third Party Insurance The contractor shall be responsible for making good to the satisfaction of the Engineer in Charge any loss or any damage to all structures and properties belonging to IITH or being executed or procured or being procured by IITH or of the other agencies within the premises of all work of IITH if such loss or damage is due to fault and or the negligence or willful acts or omissions of the contractor, his employees, agents, representatives.

The contractor shall take sufficient care in moving his plants, equipment and materials from one place to another so that they do not cause any damage to any person or to the property of IITH or any third party including overhead and underground cables and in the event of any damage resulting to the property of the IITH or to a third party during the movement of the aforesaid plant, equipment or materials, the cost of such damages including eventual loss of production, operation or services in any plant or establishment as estimated by the IITH or ascertained or demanded by the third party, shall be borne by the contractor.

- 31.2 Before commencing the execution of the work, the contractor, shall insure and indemnify and keep IITH harmless of all claims, against the contractor's liability for any materials or physical damage, loss or injury which may occur to any property, including that of IITH or to any person including any employee of IITH, or arising out of the execution of the work or in the carrying out of the contract, otherwise than due to the matters referred to in the provision to (a)above. Such insurance shall be effected for an amount sufficient to cover such risks. The terms shall include a provision whereby, in the event of any claim being brought or made against IITH the insurer shall indemnify IITH against such claims and any costs, charges and expenses in respect thereof.

- 31.3 The contractor shall also at times indemnify IITH against all claims, damages or compensation under the provisions of Payment or Wages Act, 1936, Minimum Wages Act, 1948, Employer's Liability Act, 1938, the Workman's Compensation Act, 1947, Industrial Disputes Act, 1947 and Maternity Benefit Act, 1961, or any modification thereof or any other law relating thereof and rules made there under from time to time.

- 31.4 Contractor shall also at his own cost carry and maintain any and all other insurance(s) which he may be required to take out under any laws or regulation from time to time. He shall also carry and maintain any other insurance, which may be required by the Engineer-in-Charge.

- 31.5 The Contractor shall prove to the Engineer-in-charge from time to time he has taken out all the insurance policies referred to above and has paid the necessary premiums for keeping the policies alive till expiry of the Defects Liability Period.

- 31.6 The aforesaid insurance policies shall provide that they shall not be cancelled till the Engineer-in-charge has agreed for cancellation.

31.7 Remedy on the contractor's Failure to insure If the contractor shall fail to effect and keep in force the insurance referred to above or any other insurance which he /they may be required to effect under the terms of the contract then and in any such case Engineer-in-charge may without being bound to, effect and keep in force any such insurance and pay such premium or premiums, as may be necessary for that purpose and from time to time deduct the amount so paid by the Engineer-in-charge from any moneys due or which may become due to the contractor or recover the same as a debt due from the contractor.

32.0 INDEMNITIES:

The Contractor shall indemnify and hold harmless the IITH, the IITH's Personnel, and their respective agents, against and from all claims, damages, losses and expenses (including legal fees and expenses) in respect of:

a) bodily injury, sickness, disease or death, of any person whatsoever arising out of or in the course of or by reason of the Contractor's design (if any), the execution and completion of the Works and the remedying any defects, unless attributable to any negligence, willful act or breach of the Contract by the IITH, the IITH's Personnel, or any of their respective agents, and damage to or loss of any property, real or personal (other than the Works), to the extent that such damage or loss arises out of or in the course of or by reason of the Contractor's design (if any), the execution and completion of the Works and the remedying of any defects, unless and to the extent that any such damage or loss is attributable to any negligence, willful act or breach of the Contract by the IITH, the IITH's Personnel, their respective agents, or anyone directly or indirectly employed by any of them.

33. Third Party Quality Assurance (TPQA):

1. In order to achieve a high standard of quality, it may be required to go for Third Party Quality Assurance. For this purpose, a separate agency may be appointed by the IITH who will carry out independent testing of materials and checking and ensure overall quality procedures. The Contractor shall be required to fully cooperate with the agency and facilitate them in taking samples, transportation and examination of various activities including documentation at no extra time and cost. In case of any adverse findings by the agency, the Contractor shall do the needful rectifications at no extra time and cost. The Engineer-in charge shall be at liberty for ensuring quality work done through agencies like IITs/ Govt. Engineering College or Institute of repute. The successful Bidder shall include the provisions of Quality Assurance while framing the proposed methodology for tests. The expenditure towards engaging TPQA team shall be borne by IIT Hyderabad.
2. The Contractor shall allow access to Third Party Quality Assurance (TPQA) engaged by Engineer-in-charge to have a control on quality and methodology of execution. At least 10% Samples of materials for testing including Cement Concrete Cubes shall be taken jointly by Contractor and TPQA / Engineer-in-charge or his authorized representative. TPQA agency shall conduct independently at least 10% of the total tests as required as per mandatory tests /contract specifications/ BIS/ IRC /MORTH requirements. All the arrangements required for sampling, transporting and getting them tested including testing charges shall be borne by the Contractor for which nothing extra shall be payable. The Contractor shall extend full cooperation to Third Party Quality Assurance Agencies engaged by the department for the Project during their field visits for arranging the necessary quality assurance tests for materials and the construction works.

3. For all the Electrical & Mechanical works, the TPQA agency shall prepare a quality assurance plan and checklist in accordance with the latest CPWD Quality assurance policy and checklist for E&M Services and get it approved from the EIC of Minor Component for implementation of same during the execution of work,

34. Mode of Operandi of Engineers-in-Charge (EIC) of the work:

- (a) Executive Engineer (Civil), Construction and Maintenance Division, IIT Hyderabad shall act as Engineer-in-Charge of Major Component which includes Civil, Horticulture and Road works.
- (b) Executive Engineer (Electrical), Construction and Maintenance Division, IIT Hyderabad shall be act as Engineer-in-Charge of Minor Component which pertaining to all Electrical and Mechanical works.
- (c) Other than minor component, all other purpose shall be dealt by Engineer-in-charge of Major component.
- (d) Running payment for the major component shall be made by Engineer-in-Charge of major component to the main contractor.
- (e) Running payment for the minor component shall be made by Engineer-in-Charge of minor component directly to the main contractor.
- (f) In case the main contractor intends to change any agency/agencies during the operation of the contract, he shall obtain prior approval of respective Engineer-in-Charge of the agreement. The new agency/agencies shall also have to satisfy the laid down eligibility criteria. In case Engineer-in-Charge of respective major/minor component is not satisfied with the performance of any agency, he can direct the contractor to change the agency executing such items of work and this shall be binding on the contractor.
- (g) Final bill of whole work shall be finalized and paid by the Engineer-in-Charge of major component i.e. Executive Engineer (Civil). Other Engineer-in-Charge of minor component i.e. Executive Engineer (Electrical) will prepare and pass the final bill for their component of work and pass on the same to the Engineer-in-charge of major component, for including in the final bill for composite work. This model may do be adopted for running bills at the discretion of the Institute.
- (h) Levy of Compensation under Clause 2, if any, and rescheduling of milestones as stipulated under clause 5, will be decided by Superintending Engineer on receipt of required information in this regard from Engineer-in-Charge of major discipline as well as concerned Engineer-in-Charge of minor discipline.
- (i) Milestones mentioned at Schedule-F are applicable for composite major and minor components of the work. The sequence of the major and minor component Activities shall happen as the actual flow of the work. But as the milestones are mentioned in Financial quantum, which will be reviewed RA bills wise of combined Major & Minor Components of work, the amount to be withheld under Clause 5 of the contract will be decided by the Engineer-in-Charge of the respective component and to that extent on passing of every RA bill by E in C of minor component will intimate the value of RA bill to E in C of major component for taking necessary action in the event of not achieving the necessary milestones as assessed from milestone bar chart, specified percentage of the tendered value of work will be withheld for failure of each milestone.

- (j) The composite work is treated as complete when all the components of the work are complete. The Completion Certificate of the composite work is recorded by Engineer-in-charge of major component after record of completion certificate by the Engineer-in-Charge of minor components.
- (k) Other than technical & contractual issues pertaining to minor component (i.e. E& M works) for all other purposes of contractual agreement like Arbitration case/Court case, if any, such shall be handled with main contractor by the Engineer-in-Charge of the major component with the support of Engineer-in-Charge of the minor component.

35. Factory Setup:

Contractor or his specialized agency shall establish the factory to cater to the production needs of the project keeping in view the project timelines. The Contractor shall submit the floor layout marked with locations of the moulds. The contractor shall incorporate the mould cycle time in the project schedule for each type of precast element, so that the production time lines are met and the same is in line with overall project completion. The factory shall have mechanism in place for accelerated curing. It shall have sufficient space for Stacking of precast panels as per approved stacking methodology.

Captive Batching Plant: Factory shall have a captive batching plant of suitable capacity to cater the production needs as stated above. Periodic calibration of the same shall be carried out as per CPWD and IS Code Specifications.

Quality Control Lab: Quality Control lab shall be established equipped with all lab equipment to carry out tests as specified in CPWD Specifications 2019. Test results shall be furnished in the prescribed formats bound in registers issued by Engineer in charge.

36. Moulds:

Moulds for precast elements shall be of steel. For design of the moulds for various elements, special importance shall be given to easy de-moulding and assembly of the various parts. At the same time rigidity, strength and water tightness of the mould shall also be taken into consideration. Moulds shall be periodically checked for correctness of dimensions, surface undulations, Right angles etc. and the report shall be submitted to the Engineer in charge. Defective moulds shall be repaired and those beyond repair shall be discarded and replaced with new one.

Moulds for Toilet units (PODs) or similar units shall be provided with shutter vibrators (External Vibrators).

37. Stacking:

Stacking methodology of Precast Elements shall be vetted by the structural designer and the same shall be submitted to the Engineer in charge for final approval.

38. Production of Precast Elements and De-moulding

Concrete cubes representing the production of precast panels shall be tested at an age of 24 hrs and only upon achieving desired strength (15 MPa or as specified by the designer whichever is more) shall be allowed to de-mould and stack.

39. Loading and Transportation:

Loading and Transportation methodology shall be vetted by structural designer and the same shall be submitted to Engineer in charge for final approval. Upon receipt of precast elements at site, the same shall be inspected and the elements with structural damage

shall be discarded.

40. Erection of Precast Elements:

Erection methodology shall be submitted with clearly mentioning the temporary supporting mechanism for each type of element. The required strength of Non Shrink Grout for removing the temporary supports shall be mentioned in the drawing while vetting by the designer. Only after checking the Grout Cube strength at the age of 24 hrs or as specified by the designer, the temporary supports shall be removed and the next stage of erection shall be carried out.

Appearance: There shall be no offsets at the junction of precast elements beyond the tolerance limits. The erection tolerances shall be vetted by the structural designer. Any offset which are visible in the elevation and other parts of the building shall be smoothly grinded and matched with the surface.

41. Joints and Waterproofing of Entire Structure:

All joints of the precast elements shall be weather proof (Free from any seepage and dampness). Entire structure including joints, slabs, toilets, balconies, utility areas, corridors, entire floor areas of the flats/hostels, Terraces, LMR and Mumty Roofs etc. shall be waterproofed as per the methodology approved by the Engineer In charge.

42. Plant and Machinery:

Contractor has to submit a detailed plan of plant and machinery required for production at factory and erection at site. The same shall be prepared to cater the production and erection needs. There shall not be project idle time in the production and erection stage of the project due to non-availability of any of the plant and machinery.

43. Putty and Painting:

There shall be no undulations visible after application of putty. Painting shall be commenced only after satisfaction of Engineer-In charge regarding the surface appearance. Any undulation visible shall rectified at the Risk and cost of the contractor.

44. FACTORY ACCEPTANCE TESTING (FAT):

The Contractor shall facilitate and organise Factory Acceptance Testing (FAT) inspections for IIT Hyderabad personnel who are nominated for the items which are mandatorily required FAT inspections by Engineer-in-charge.

45. PRO-RATA BASIS PAYMENTS:

The Building wise /Sub-Head wise Percentage weightages of payment schedule of items mentioned at Financial Bid Document Vol.2(a) and 2(b) are indicative and the payment may be released on Pro-rata basis against progressive quantum of work executed/procured materials as the case applicable to enable the cash flow to the Contractor as per the directions of Engineer-in-Charge.

SPECIAL CONDITIONS OF CONTRACT FOR EXECUTION OF ALL SPECIALIZED ELECTRICAL & MECHANICAL (E & M) WORKS:

Association of Other Agencies for Execution of Specialized E&M Works by Main Contractor:

1. The bidder should either himself meet the eligibility conditions for the respective E&M components or otherwise he will have to associate with specialized agencies, fulfilling the eligibility requirements and hence consent letter from at least one eligible associate agency of the respective components of E&M work shall also be submitted as per attached Proforma as per Form "P".

In case the main contractor is himself eligible (as per eligibility criteria) for executing any specific minor component and intends doing the job himself, he may not be required to associate with another agency for that minor component of work. In such cases the main contractor also has to submit the documents as per eligibility criteria mentioned for associated agency of individual E&M component.

However, the Composite category contractor shall also be eligible to carry out himself any or all of these works without associating any specialized agency provided:

He fulfil the prescribed eligibility criteria respectively for these work(s)

If the main contractor does not fulfil the minimum eligibility criteria, the main contractor has to enter into MoU with agencies contractor(s) associated by him who is found eligible as per the eligibility criteria. Copy of such MoU shall be submitted to Engineer -in- charge of minor component .In case of change of associate contractor, the main contractor has to enter into agreement with the new contractor associated by him.

In case the main contractor intends to change any of the above agency/agencies during the operation of the contract, he shall obtain prior approval of Engineer-in-charge of relevant specialized component(s). The new agency/agencies shall also have to satisfy the laid down eligibility criteria. In case Engineer-in-charge is not satisfied with the performance of any agency, he can direct the contractor to change the agency executing such items of work and this shall be binding on the contractor.

The department (CMD, IITH) reserves the right to allow the main firm to submit additional Documents/additional names of the associates in case of the deficiencies in documents or in case of no associate getting qualified in respect of certain subheads. The same will have to be complied with the main contractor within the time allowed. The decision of the department shall be firm & binding on the intending bidders.

The main contractor should submit the willingness from eligible electrical/specialized contractors to get associated with him/her for execution of the specialized E & M component of works in wholesome manner and as per the conditions set out in the MOU to be entered into, between the one who is awarded the work and the associated eligible electrical contractor.

2. The main contractor has to submit the following documents for association of specialized agencies /associated contractor within one month of award of work:
 - (i) In support of the eligibility conditions of the proposed associated Contractor, copy of their registration documents, Electrical License, GST Documents duly attested by the applicants (Main Contractor) shall be submitted to the Engineer-In- Charge for deciding the eligibility. Each such Associated Contractor will certify that they are not debarred

from any Central Govt./State Govt., Central/State Govt. PSU/Autonomous bodies as on the day of application of tender. Proposal for associating agency for minor components of work shall be submitted in Form- "N" of this tender document from each associate independently for all electrical and mechanical components.

- (ii) The main contractor will submit the true copy of MOU signed with eligible associated agency. The MOU in the enclosed Form Q shall be signed by both the parties" main contractor i.e., as 1st party and associated contractor as 2nd party. Independently for all electrical and mechanical components.
3. In the event of the concerned E&M agency not performing satisfactorily or failure of associate contractor to complete the E&M work, the main contractor on written directions of the Engineer in Charge of minor component, shall remove the associate contractor deployed on the work and shall submit name of new associate who fulfil the conditions mentioned in IITH to execute the left over work without any loss of time or variation in cost to the department. Such associates shall also give an undertaking along with the main tenderer but both of them together will stand guarantee for the equipment already supplied for which payment has been released by the department in part. If any equipment supplied for the work, during the currency of the earlier Associate contractor and paid partly by the Dept., becomes redundant /not in a position to be installed and commissioned and put to beneficial use due to change in agency for execution of E&M work, the main contractor shall be liable for replacement of the equipment(s) at no cost to Department. No change of Associated Contractor will be allowed without prior approval of the Engineer-in-charge of minor component of the work.
4. In respect of all works i.e., IEI & Fans, Street lighting, Lifts, Firefighting System, Fire Alarm System, MV Panels, Solar water heating system, LAN, Wi-Fi and networking, HVAC equipment's etc., the materials shall be procured only from the original equipment manufacturers/ authorized dealers of OEM. The contractor shall submit all documentary details in fulfilment of this conditions regarding procurement of materials including relevant test certificates.
5. Special Conditions for E&M Work are appended with this tender. It will be obligatory on the part of the contractor/tenderer to sign the tender documents for all the component parts.
6. The main contractor shall be responsible and liable for proper and complete execution of the E & M work and ensure coordination and completion of both civil and E & M work.

The associate contractor shall attend the inspection of the work by the Engineer-in-Charge of E&M works as and when required. The agencies executing the electrical work should have valid license for LT/HT as applicable and as described in eligibility criteria. Verifiable completion certificates of the work eligibility documents as the case may be, duly attested by the applicant shall be submitted. Valid Electrical Contractor' license, as the case may be, duly countersigned by the applicant as well as signed by the associate contractors shall also be submitted. Self-attested GST documents in respect of the associated agencies as well as signed by associate firms shall be submitted after the award of work.

The agencies executing the electrical work should have valid license for LT/HT as applicable and as described in eligibility criteria.

Class 1 category Electrical license issued by respective state department is required to execute any HT work. Class 2 category Electrical license issued by respective state department is required to execute any LT work. Main contractor/associate contractor shall submit the eligibility documents accordingly.

Additional Mandatory conditions for DG set works:

- (a) The DG Set(s) and AMF panel of specified makes are procured from OEM/ OEA only.

- (b) Inspection and testing of DG set and AMF panel before dispatch is carried out in the workshop of OEM/OEA only.
- (c) After the award of work, the contractor is required to submit:
 - (i) Written commitment from OEM/OEA to supply the DG Sets as per the delivery schedule as per requirement of department.
 - (ii) Certificate from OEM/OEA or authorized service provider of engine manufacturer for satisfactory installation and commissioning of DG Set after completion of the work.
 - (iii) Required Guarantee of DG Set from OEM/OEA in favour of Engineer-in-Charge to cover defect liabilities.
 - (iv) An undertaking that mandatory free service is carried out during the guarantee period by the authorized service provider of engine manufacturer.

Conditions for Specialized E&M Original Works and other original E&M Works:

The lowest tenderer is required to submit, along with the performance guarantee after the acceptance of tender, an undertaking from the OEM regarding:

- (a) Authorization certificate.
- (b) The OEM is unconditionally support the lowest tenderer technically throughout the execution of contract as well as for Maintenance/ Comprehensive Maintenance Contract for the useful life of the system, and
- (c) OEM provides all the spares required for healthy functioning of the equipment for at least five (5) years from the date of supply of equipment as per the terms and conditions of maintenance contract.

GENERAL CONDITIONS FOR ALL E&M WORKS:

1. The agency must study various CPWD specifications; get themselves acquainted with site and site conditions, provision for firefighting system for various buildings in local byelaws and additional conditions carefully. The work shall be executed in close co-ordination with the progress of building work.
2. All the equipment shall be delivered with
 - (i) Manufacturer's test certificate,
 - (ii) Manufacturer's technical catalogues and Installation / Instruction (O&M) manuals.
3. Scaffoldings & any other T & P required for execution, testing and commissioning of work shall be arranged by the contractor and is included in the cost of work tendered by the contractor.
4. The design layout plans / drawings / other documents pertaining to E & M services shall have to be submitted by the consultant engaged by the contractor for approval from the Engineer in Charge of minor component within the time period as specified in the approved milestone chart.
5. The main contractor shall submit the milestone/pert chart for completion of each activity as per the scope of work including details design and engineering, drawings, submissions and the same shall be got approved from the Engineer in Charge of minor component for further necessary execution.
6. Inspection before Dispatch: All routine tests shall be conducted before dispatch of equipment's. No equipment shall be dispatched out from the manufactures premises before such tests are conducted and test result recorded. These test certificates shall be given along the supply of equipment. The Engineer- in-charge shall, if he so desires

inspect and witness the pre-delivery tests. For this purpose, the agency shall give 15-day advance notice. Agency shall arrange for inspection of the department (FAT). The main contractor has to organize the FAT inspections with IITH personnel by intimating them in advance. However, the inspection shall be done at the discretion of the Engineer-In-charge without any additional cost implication by the contractor to IITH for FAT but ROUTINE TEST & TYPE TEST Certificates shall have to be submitted for equipment.

7. Prior to dispatch, all equipment's shall be adequately protected & insured for the whole period of transit, storage and erection against corrosion and incidental damages etc. from the effect of vermin, sunlight, rain, heat, humid climate and accidents etc.
8. **PROCEDURE FOR APPROVAL OF MATERIALS, SHOP FLOOR DRAWINGS AND COMMENCEMENT OF WORK**

Within the time specified in the approved table of milestone, the contractor shall submit the following documents for approval.

- (i) List of makes & Model numbers of all items of equipment and accessories each sub Head of work.
- (ii) Catalogues of the equipment to be supplied.
- (iii) Shop floor drawings of each packages/ Sub work separately for approval.

It is the responsibility of the tenderer to get the makes, models and shop floor drawings approved by the Engineer-In-charge before placing of order.

9. **Quality of material and workmanship:** All parts of the equipment shall be of such design, size and material so as to function satisfactorily under all rated conditions of operation. All components of the equipment shall have adequate factor of safety. The work of fabrication and assembly shall conform to sound engineering practice and on the basis of "Fail Safe Design". The mechanical parts subject to wear and tear shall be easily replaceable type. The construction of the equipment shall be such as to facilitate easy operation, inspection, maintenance and repairs. All connections and contacts shall be designed to minimize risk of accidental short circuits caused by animals, birds and vermin etc. All identical items and their component parts should be completely interchangeable including spare parts.

10. Inspection and testing at site:

- (i) The installation shall be subject to necessary inspection during every stage of erection, by the Engineer In-charge or his authorized representative. The Contractor shall provide all facilities and assistance for the purpose.
- (ii) The completed installation shall be inspected and tested by the Engineer-in charge in the manner as will be laid down by department.
- (iii) All instruments and facilities necessary for the tests at site shall be provided by the agency.
- iv) Some of the mandatory test to be complied by the contractor are as follows:
 - a) Insulation resistance test of cables
 - b) Insulation resistance test of ACBs/MCCB
 - c) Earth Resistance Testing
 - d) Functional Testing of LT Panel
 - e) Power supply quality testing
 - f) solar hot water system performance testing
 - g) Lift functional testing on rated load conditions
 - h) Radiant cooling system performance test
 - i) HVAC Chillers performance testing

11. Completeness of work:

- (i) The installations shall be completed in all respects and put in to operation even where certain details have not been mentioned / left out in these specifications. Any discrepancy may be brought out in pre-bid meeting.
- (ii) All E&M services such as Internal Electrical installations, Lifts, UPS, Fire-fighting system, sprinkler system & Addressable fire alarm system, D.G. sets, substation MV panels, street lighting, Solar Hot water system etc. shall be declared as completed after completion of trial run of 1 month or completion of whole work whichever is later. However, maintenance of these installations during the maintenance period of 36 months shall be carried out by the agency at his own cost.
- (iii) DLP / Warranty period of all works / machine / equipment shall commence from date of completion of complete work each building wise.
- (iv) All electrical & mechanical fittings / fixture / appliances, to be provided for the work, where BEE certification is available should have 5-star rating (of BEE).

The CPWD specifications are available at CPWD website "cpwd.gov.in". The department shall not be responsible for the lack of knowledge and also the consequences thereof to the Contractor. The information and data mentioned in the tender document have been furnished in good faith and for general information and guidance only. The Engineer-in-Charge in no case shall be held responsible for the accuracy thereof and / or interpretations or conclusions drawn there from by the Contractor and all consequences shall be borne by the Contractor and no claim, whatsoever, shall be entertained from the Contractor, if the data or information furnished in tender document is different from data / drawing after Preparation of architectural drawings, design and approved for construction. It is presumed that the Contractor has satisfied himself for all possible contingencies, situations, bottlenecks and acts of coordination, which may be required between different agencies.

12. **QUALITY ASSURANCE:** The Contractor shall make available, on request from the Department, for record, copies of challans, Purchase order copy, receipts and other certificates, if any, vouchers towards the quantity and quality of various materials procured and the same shall be kept in record. These shall also provide information on the name of the manufacturer, manufacturer's product identification, manufacturer's instructions, warning, date of manufacturing and test certificates from manufacturers for the product for each consignment delivered at site, shelf life, if any, for the department to ensure that the material have been procured from the approved source and of the approved quality, as directed by the Engineer-in-Charge. Day to day account of receipt of such material shall be maintained at site of work and shall be regulated by the department. Nothing extra shall be payable on this account. The contractor shall prepare a Quality Assurance Plan (QAP) in line with the CPWD Quality Assurance Policy and Checklist for E and M services and get it approved from the Executive Engineer-Electrical, IITH for further implementation during execution of Project.

13. **STORAGE OF MATERIALS:** Storage and safe custody of all materials shall be the sole responsibility of the Contractor. Nothing extra shall be payable on this account.

14. **QUALITY CONTROL AND TESTING OF MATERIALS:**

- (i) All the material to be used on works shall bear ISI certification mark unless otherwise the make is specified in the item or special conditions appended this tender document. In case ISI mark material or the materials mentioned in the tender documents are not available, as per opinion of Engineer-in-charge, which shall be final and binding, the material to be used shall conform to CPWD specifications applicable in this tender or IS Code. In such cases Engineer-in-charge shall satisfy himself about the quality of

such material and give his approval in writing. Only articles classified as first quality by the manufacturers shall be used unless otherwise specified. All material not having ISI mark shall be tested as per relevant ISI specification. The Engineer in charge may relax the condition regarding testing if the quantity of the materials required for the work is small. In all cases of use of ISI marked materials proper proof of procurement of materials from authentic manufacturers shall be provided by the contractor to the entire satisfaction of Engineer-in-charge. All materials equivalent to the one specified should be got approved by the Engineer-in-charge before using the said materials in the work.

- (ii) If the department desires to send any samples of materials for testing in an accredited laboratory, the Contractor at his own expense shall supply all materials, labour for preparing and testing samples as required by the Engineer-in-Charge. The testing shall be carried out in the presence of the representative of the Engineer- in- Charge. The transportation and testing charges shall also be borne by the contractor. The major samples which can be tested are wires, cables, PEX pipes, Chiller MS Pipes, PVC/MS Conduit Pipes.
 - (iii) Main contractor/ Associate Agency shall submit the required quantity of material as sample for testing from Govt./ Approved Private Laboratory.
 - (iv) Department shall send the samples to the testing laboratory & the test results shall directly come to department however, the cost of all testing shall be borne by the contractor.
15. No foreign exchange shall be made available by the department for importing (purchase) of equipment, plants, machinery, materials of any kind. No delay and no claim of any kind shall be entertained from the Contractor on account of variation in the foreign exchange rate and/or any Custom duties / charges or any other levies.
16. The tenderers shall take into account the element of wastage(s) those are likely to be there in all elements of the work and quote his price, taking that into account. The tenderers shall study all the items from the point of view of wastage(s), which are likely to take place.
17. Power supply required for construction, testing & commissioning shall have to be arranged by the Contractor at his own costs. Water required for testing of equipment is also in the scope of agency.
18. The description of E &M service & specification are given in general but they are not exhaustive i.e.; does not mention all the incidental works required to be carried out for complete execution of the item of work. The work shall be carried out, all in accordance with true intent and meaning of the specifications and the drawings taken together, regardless of whether the same may or may not be particularly shown on the drawings and/ or described in the specifications, provided that the same can be reasonably inferred there from. There may be several incidental works which are not mentioned in the contract document/specifications but will be necessary to complete the item in all respects. All these incidental works/ costs which are not mentioned, but are necessary to complete the work shall be deemed to have been included in the overall amount quoted by the contractor for various components of work. No adjustment of rates shall be made for any variation in quantum of incidental works due to variation/change in actual working drawings. Also, no adjustment of rates shall be made due to any change in incidental works or any other deviation in such element of work (which is incidental to the items of work and are necessary to complete such items in all respects) on account of the directions of Engineer-in-charge. Nothing extra shall be payable on this account.

19. The scope of works also covers the preparation of layout plans, drawings for E & M schemes and approval of the same from the respective local bodies viz. Fire Officer/Lift Inspector/ CFO/ Electrical Inspector etc. before the commencement of work. During execution, if the local bodies etc. require a modification, the same shall be executed without any extra cost. Finally, after execution, approvals / NOCs / clearances from local bodies etc. shall be the responsibility of successful bidder for which nothing extra is payable. In case any modification / extra work is required by the local bodies necessary for approvals / NOCs / clearances, the same shall be get executed and nothing extra shall be paid on this account. All statutory fees / charges required for obtaining clearances from Fire Officer/Lift Inspector/CEA / Local Bodies etc. shall be paid by the department.

**WLLINGNESS CERTIFICATE FROM CONCERNED COMPETENT
ASSOCIATE CONTRACTOR**

(Separate for each sub head of E&M work)

Name of Work: Construction of Precast 2Nos Faculty Housing Tower (G+12), 3Nos Staff Housing Towers (G+12) and 3Nos Hostel Blocks (G+6) at IIT Hyderabad, Kandi, Sangareddy.

I hereby give my willingness to work as E&M Contractor for Sub Head of the above mentioned work. I will execute the work as per specifications and conditions for the agreement and as per direction of the Engineer-in-charge. Also I will employ full time technically qualified supervisor for the works.

I will attend inspection of officers of the department as and when required.

Signature of Main Contractor

Address Telephone: FAX:

Email:

Signature of Associate Electrical
Contractor

and Registration Detail Address:

Telephone:

FAX:

Email:

FORM –N

PROPOSAL FOR ELIGIBLE ASSOCIATING AGENCIES FOR MINOR COMPONENTS OF WORK

I/we hereby propose the following agencies as per mentioned against each for executing corresponding minor components of work. Their consent letters are also attached.

Sl. No.	Name of Associated Contractor	Category and class of registration	Enlistment
	copy/completion Certificates attached	Monetary Limit of work	Validity of
	registration	Consent letter attached (Yes/No)	

Internal Electrical Installations, UPS street lighting, compound and foot path lighting etc.

Lifts

Fire Alarm, Firefighting System and water pumping system

Solar Hot Water system

MV panels, DG sets and External Service Connection cabling, earthing

LAN, Wi-Fi Networking system

Stairways and LIFT well Pressurization system

Radiant Cooling System with HVAC high side equipment's and work

Note: Self Attested photocopies of enlistment order, valid electrical contractor license, work experience certificates of each agency for each component of E&M work shall be submitted.

Signature of Main contractor

FORM –P

Name of work: Construction of precast 2Nos Faculty Housing Tower (G+12), 3Nos Staff Housing Towers (G+12) and 3Nos Hostel Blocks (G+6) at IIT Hyderabad, Kandi, Sangareddy.

CONSENT LETTER FROM ELIGIBLE ASSOCIATE AGENCY OF MINOR COMPONENT OF WORK

I / We hereby give my consent to associate with M/s , for executing the minor component of work of (Mention category).

1. I / We will execute the work as per specifications and conditions of the agreement and as per directions of the Engineer –in-Charge for the corresponding minor work till the completion of the work.
2. I / We will be responsible for necessary action to handover the installations and for rectification of defects and repair during the maintenance / warranty period.
3. Also I / We will employ full time technically qualified Engineer / supervisor for the minor component of the work as required for the work. I / We will attend inspection of officers of the department as and when required.

Date:

Signature with date of Major Component Contractor
Address

Signature with date of Associate/ Minor Component Contractor
Address

Witness with address
(From major component contractor side)

Witness with address
(From minor component contractor side)

FORM- "Q"

AFFIDAVIT OF MEMORANDUM OF UNDERSTANDING (MOU)

(to be submitted for each and every E&M component on Non-Judicial stamp paper of Rs.100/- only)

1. M/s. (Name of the firm with full address) Enlistment Status
Valid Up to:
(Henceforth called the main Contractor)

2. M/s. (Name of the firm with full address) Enlistment Status
Valid Up to:
(Henceforth called Associate Contractor or Electrical contractor) For the execution of E & M Work

Name of work:

Construction of precast 2Nos Faculty Housing Tower (G+12), 3Nos Staff Housing Towers (G+12) and 3Nos Hostel Blocks (G+6) of RCC Structures at IIT Hyderabad, Kandi, Sangareddy.

We state that M.O.U between us will be treated as an agreement and has legality as per Indian Contract Act (amended up to date) and the IITH can enforce all the terms and conditions of the agreement for execution of the above work. Both of us shall be responsible for the execution of work as per the agreement to the extent this MOU allows. Both the parties shall be paid consequent to the execution as per agreement to the extent this MOU permits. In case of any dispute, either of us will go for mediation/arbitration by the Superintending Engineer (SE) or above, IITH In charge. His decision shall be final and binding on both of us.

We have agreed as under:

1. The Associated Contractor will execute all E & M works in the wholesome manner as per terms and conditions of the agreement. The associate contractor shall be paid as per standard procedure followed by the department and the agreement between parties. Any type of internal transaction between the associate contractor and the main contractor shall be as per their convenience and mutual understanding without involving the department.
2. The Main contractor will execute E & M works by associated electrical contractor as per contract.
3. All the machinery and equipment, tools and tackles required for execution of the E & M works, as per agreement, shall be the responsibility of the Associated Contractor.
4. The site staff required for the E & M work shall be arranged by the Associated Contractor as per terms and conditions of the agreement.
5. Site order book maintained for the said work shall be signed by the main contractor as well as by the Engineer of the Associated Contractor and by Associated Contractor himself.

6. All the correspondence regarding execution of the E & M work shall be done by the department with the Associated Contractor with a copy to the main contractor. In case of non-compliance of the provisions of agreement, the main contractor, as well as the associated contractor shall be responsible. The action under relevant clause of contract will be taken.
7. The main contractor will make payment to associate contractor as and when bill paid by department, failure to which department shall make payment to associate contractor as per contract condition.

Name of the Sub Head to be indicated:

SIGNATURE OF MAIN CONTRACTOR with Address, telephone No., FAX, email

DATE:

PLACE:

SIGNATURE OF ASSOCIATED CONTRACTOR with Address, telephone No., FAX, email

Date:

Place:

1. Witness with address

2. Witness with address

(From major component contractor side)

(From minor component contractor side)

Countersigned Executive Engineer(E)

List of Minimum number of Testing Equipment's for Electrical & Mechanical works

- 1) Megger 2 nos.
- 2) Earth Tester 2 nos.
- 3) Lux meter 2 nos.
- 4) Wire Gauge 2 nos.
- 5) Multi meter 2 nos.
- 6) Vernier Calipers 2 nos.
- 7) Tong Tester 2 nos.
- 8) Conduit bending machine 2 nos.

Volume 1 :: Section 3

Mandatory Compliances to achieve
GRIHA Certification

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The project is aimed to achieve 4 star GRIHA Rating. To achieve this objective, the Contractor shall adhere to the mandatory stipulations of TERI. These stipulations and guidelines are placed as Appendix to the Special Conditions of Contract. Nothing extra shall be payable towards adherence to these stipulations and guidelines and all costs towards the same shall be deemed to have been included in the quoted prices.

1. ADDITIONAL SPECIFIC CONDITIONS OF CONTRACT FOR GRIHA RATING SYSTEM:

1.1 The contractor is required to adhere to the various environment friendly and GRIHA compliant aspects of construction as well as documentation w.r.t. use of Materials, Manpower, Machinery and other relevant mandatory requirements. All sanitary and plumbing fixtures shall be of low flow category and shall comply requirements to achieve GRIHA certification. Nothing extra shall be payable over and above the quoted rates for complying with these requirements

1.2 To achieve the above, the contractor shall adhere to the following during construction:

- a) Provide adequate level of sanitation and safety facilities for construction workers.
- b) Plan utilities efficiently and optimize on-site circulation efficiency
- c) Efficient use of available water
- d) Reduce air and noise pollution due to storage / use of materials and machinery.
- e) Reduction in waste of construction materials
- f) Proper storage and disposal of wastes. Dedicated place within the site to be earmarked for sorting and sorting construction waste.
- g) Implement recycling programme as far as possible to recycle construction waste materials during construction
- h) Suitable arrangement for preventing dust and debris entering duct work and working areas.
- i) Create physical barriers between work and non- work areas.
- j) Protection of materials and equipment against moisture, dust etc
- k) Keeping work area clean and dry.
- l) Shall take safety measures to avoid damage to existing plants and trees.

1.3 Use of low emitting adhesives and sealants to-

- a) reduce/ avoid use of materials, which are irritating and naturally cause health problems to the construction workmen and occupants.
- b) Achieve specified Volatile Organic Compounds (VOC) limits as per the requirements given in Table - 1 & Table - 2 below

**TABLE-1
LIST OF ADHESIVES AND SEALANTS**

Sl.No	Types of Applications	Maximum VOC
1.	Laminate Adhesive	30
2.	Wood Flooring Adhesive	10
3.	Ceramic Tile Adhesive	65
4.	Rubber Flooring Adhesive	60
5.	Sub Floor Adhesive	50
6.	Structural Glazing Adhesive	10
7.	Architectural Seal Non	25
8.	Indoor Carpet Adhesive	50

TABLE-2

LOW EMITTING MATERIAL PAINTS

Interior paints (walls, ceiling, wood polish etc.) should conform to the following criteria

Sl.No	Type of Applications	VOC Limit(g/L)
1.	Flats	50
2.	Non-flat	50
3.	Anti-rust paints	250
4.	Varnish	350
5.	Lacquer	550
6.	Floor Coatings	100
7.	Water proofing sealers	250

1.4 Use only those materials which conform to the GRIHA Rating System criteria.

1.5 The contractor shall maintain proper record of all the materials/ equipment procured w.r.t. their source & specifications with details of their manufacturing and recycled content etc. and submit along with all supporting documents to the Engineer-In-Charge.

1.6 Construction waste management plan:

The broad intent of this credit is to avoid materials going to landfills, during construction. It is required to develop a plan to recycle all possible waste generated during construction. Typical items would include land clearing debris, concrete, steel, duct work, clean dimensional wood, paperboard and plastic used in packing, etc.

The plan should include where these materials will be sent to and the mode of transportation also. Donation of construction waste to other buildings for use, is also deemed as having addressed the intent of this credit. The contractor should have a system to document the disposal of construction waste.

1.7 Indoor Air Quality (IAQ) Management Plan

The contractor shall be required to take the specific measures during construction w.r.t. following main areas of concern:

a) HVAC System Protection:

When performing construction activities that produce dust, such as drywall sanding, concrete cutting, masonry work, wood sawing or additional insulation, seal off the supply diffusers and return air system openings completely for the duration of the task. Shut down and seal off the supply diffusers and return air ducts during any demolition operation.

Till the HVAC system is put into use, seal-off the supply diffusers and return air system openings to prevent the accumulation of dust and debris in the duct system during construction.

Do not use the mechanical rooms to store construction or waste materials. Keep rooms clean and neat.

Provide periodic duct inspections during construction; if the ducts become contaminated due to inadequate protection, clean the ducts as per requirements and directions of Engineer-In-Charge.

b) Contaminant Source Control:

- Use low VOC products as indicated by the specifications to reduce potential problems.
- Restrict traffic volume and avoid idling of motor vehicles as their emissions could be drawn into the building.
- Utilize electric or natural gas alternatives for gasoline and diesel run equipment where possible and practical. Use low Sulphur diesel in lieu of regular diesel
- Cycle equipment off when not being used or needed
- Exhaust pollution sources to the outside with portable fan systems
- Prevent exhaust from re-circulating back into the building
- Keep containers of wet products closed as much as possible. Cover or seal containers of waste materials that can release odor or dust.
- Protect stored on site or installed absorptive building materials, for instance, Cement, Gypsum/ POP etc. from weather and moisture; wrap with plastic and seal tight to prevent moisture absorption.

c) Pathway interruption:

- Provide dust curtains or temporary enclosures to prevent dust from migrating to other areas, where applicable.
- Locate pollutant sources as far away as possible from areas occupied by workers when feasible
- During construction, isolate areas of work to prevent contamination of clean or occupied areas. Pressure differentials may be utilized to prevent contaminated air from entering clean areas.
- Depending on weather, ventilation using 100% outside air will be used to exhaust contaminated air directly to the outside during use of VOC emitting materials.

d) Housekeeping:

- Provide regular cleaning concentrating on HVAC equipment and building space to remove contaminants from the building prior to occupancy.
- All coils, air filters, fans & ducts shall remain clean during installation and, if required, will be cleaned prior to performing the testing, adjusting and balancing of the system.
- Schedule high pollution activities that utilize high VOC level products (including paints,

sealers, insulation, adhesives, caulking and cleaners) to take place prior to installing highly absorbent materials (such as ceiling tiles, gypsum wall board, fabric furnishings, carpet and insulation, for example).

- Suppress and minimize dust with wetting agents or sweeping compounds. Utilize efficient and effective dust collection methods such as a damp cloth, wet mop, or vacuum with particulate filters, or wet scrubber.
- Remove accumulations of water inside the building. Protect porous materials such as insulation and ceiling tile from exposure to moisture.
- Thoroughly clean all interior surfaces prior to replacing filters and running HVAC system for system balancing, commissioning and building flush- out.

1.8 Scheduling and construction activity sequence

1.9 Schedule high pollution activities that utilize high VOC level products (including paints, sealers, insulation, adhesives, caulking and cleaners) to take place prior to installing highly absorbent materials (such as ceiling tiles, gypsum wall board, fabric furnishings, carpet and insulation, for example).

1.10 Photographs during various stages of construction shall be taken by contractor and submitted to the Engineer- In-Charge, showing details of specific requirements/ measures being taken by the contractor towards above.

1.11 Provide photographs of the above activities during construction for documentary compliance and records.

1.12 Contractor shall coordinate with suppliers of various materials and equipment to be procured by him for use in works and provide all required details w.r.t. their manufacturing facilities; raw materials etc. as per requirements of GRIHA Certification guidelines. Preference should be given to GRIHA compliant products/ materials.

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GENERAL INFORMATION

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GENERAL INFORMATION TO BIDDERS FOR SUBMISSION OF BIDS

- 2.1 The tenderers should read all the instructions, terms & Conditions, contract clauses, nomenclature of items, specifications etc. contained in the tender documents very carefully, before quoting the rates. The tenderer should also read the General Conditions of Contract for works on EPC mode attached along with the tender documents which will be part of the agreement.
- 2.2 The agency shall quote the rate for complete scope of work in both words and figures in the financial bid.
- 2.3 The bidder shall quote his rates keeping in mind the scope of work, specifications, terms & conditions, additional conditions and special conditions etc. and nothing shall be payable extra whatsoever unless otherwise specified.
- 2.4 The contractor shall also furnish Performance Guarantee of 5% of the tendered amount (50% of Performance Guarantee shall be retained as security deposit which will be returned after successful completion of defect liability period) in addition to the other deposits mentioned elsewhere in the contract for proper performance of the agreement. The Performance Guarantee shall be in the shape of Bank guarantee as per Performa given in **GCC for EPC Projects Volume – VI**.
- 2.5 In the event of the tender being submitted by a firm, it must be signed separately by each partner thereof or in the event of the absence of any partner, it must be signed on his behalf by a person holding a power of attorney authorizing him to do so. Such power of attorney should be produced with the tender and it must be disclosed that the firm is duly registered under the Indian partnership act, 1952.
- 2.6 The bidder shall quote their rates considering all prevalent taxes/ cess like GST, Workers Cess or any other tax on material /work as applicable and nothing extra shall be paid to the contractor on this account. IIT Hyderabad (the Institute) shall deduct Workers Cess, Royalty or any other tax as applicable, from the R/A bills & final bill. However, the contractor shall pay GST to the concerned authorities directly as per prevailing rules.
- 2.7 TDS as applicable shall be deducted from all bills of contractor.
- 2.8 The tender which is not duly signed by authorized signatory or with conditions shall be treated as non-responsive and shall be summarily rejected.

INFORMATION AND INSTRUCTIONS FOR BIDDERS:

- 2.9 Contractors who fulfil the following requirements shall be eligible to apply. **Joint ventures/Consortium and Special Purpose Vehicles (SPV) are not accepted.**
- 2.10 The enlistment of the contractors should be valid on the last date of submission of bids. In case the last date of submission of bid is extended, the enlistment of contractor should be valid on the original date of submission of bids.

2.11 Eligibility criteria for work experience –

To become eligible for participating in the bid process, all the bidders shall satisfy the following work experience criteria.

(a) *The bidder should have satisfactorily completed the following works in last 7 (seven) years ending previous day of last date of submission of bid. For this purpose, cost of work shall mean gross value of the completed work including cost of material supplied by the Government/client but excluding those supplied free of cost:-*

(i) *Three similar completed works of Civil Component of each of value not less than Rs. 82.00 Crore.*

or

Two similar completed works of Civil Component of each of value not less than Rs. 123.00 Crore.

or

One similar completed works of Civil Component each of value not less than Rs. 164.00 Crore.

Similar work shall mean “Construction of PRECAST RCC structures designed as either beam-column system or wall panel-slab system and in which at least completion of one building of eight storeyed including finishings, internal & external public health Engineering systems all completed executed under one agreement in India”. (Godowns/ Ware houses/ factory Sheds shall not be considered as eligible similar works).

However, the similar work experience criteria for internal & external Electro-Mechanical works (i.e. HVAC i/c Radiant Cooling systems, Lifts, DG Sets, ELV, internal & external electrification works etc.) shall be fulfilled by Main Contractor/Agency or their Specialized Agencies as per the Vol-1,Section-4 General Information @Sl.No.2.15(C)

Components of work executed other than those included in definition of similar work shall be deducted while calculating the cost of similar work. RCC framed structure shall be of precast RCC slab, beams & columns. The bidder shall submit abstract of cost of work along with supporting documents and certificate issued by the experience issuing authority in support of this.

2.12 The value of executed works shall be brought to current costing level by enhancing the actual value of work done at simple rate of 7% per annum; calculated from the date of completion to previous day of last date of submission of bids.

2.13 Qualified similar works may be physically inspected by officers/ Expert Committee of IIT Hyderabad to ascertain the completion, performance and quality of works for finalizing technical bids.

2.14 Eligibility criteria for financial eligibility –

To become eligible for participating in bid process, the bidder shall satisfy the following financial eligibility criteria. However, CPWD registered contractors enlisted in composite category Class - I (AAA) and Class – I (Super), need not submit financial eligibility documents. However, all intending bidders including CPWD Registered contractors shall be submitted the following financial documents as mentioned at Form ‘K’ for the technical evaluation of the bids submitted by them.

- a) *The bidder should have had average annual financial turn over (gross) of Rs. 131.00 Crore on construction works during the last three Consecutive years ending March, 2022, balance sheets should be duly audited by Chartered Accountant. Year in which no turnover is shown would also be considered for working out the average. (copy of Audited Balance Sheet to be submitted).*
- b) *Should not have incurred any loss (profit after tax should be positive) in more than two years during the last five consecutive years ending 31st March 2022, duly audited and certified by the Chartered Accountant.*
- c) *Should have a Net worth certificate of Rs. 105.00 Cr. (copy of original Net worth certificate issued by Bankers, not older than six months from the last date of submission of bids, to be submitted).*

2.15 For specialized components of civil and E & M works, the eligibility criteria of associated agencies shall be as detailed below (Components of work executed other than specialized work shall be deducted while calculating the cost) –

Sl.No.	Components of Specialized Works	Estimated cost Rs. (in Crore)	Eligibility
(a) Architectural Consultancy			
1	Architectural Consultancy	--	<p>The main contractor have in-house architectural wing then they have to deploy the Architectural personnel as per the Clause-32 mentioned at Schedule-F. If main contractor shall associate with a consultancy firm headed by an architect who should possess Bachelor's degree in Architecture, registered with council of architecture with minimum 15 years of experience in the field of planning and architecture. Further, the firm should possess experience of having satisfactorily completed, as mentioned below, during the last 7 (seven) years ending previous day of last date of submission of bids under a single contract.</p> <p>The architectural consultancy should complete any Residential/Hostel Campuses of built-up area not less than 63,000 Sqm (OR) two major such campuses each having built-up area not less than 47,000 Sqm (OR) three major such campus each having built-up area not less than 32,000 Sqm.”</p>
(b) For Civil Works			
	Water proofing treatment works	--	<p>The main contractor should associate with an agency who should have satisfactorily completed the said specialized work of amount as mentioned below during the last 7 (seven) years ending previous day of last date of submission of bids under a single contract.</p> <p>Three similar works each costing not less than Rs. 3.60 Crore of the estimated cost.</p> <p style="text-align: center;">OR</p> <p>Two similar works each costing not less than Rs. 5.40 Crore of the estimate cost.</p> <p style="text-align: center;">OR</p> <p>One similar work each costing not less than Rs. 7.20 Crores of the estimate cost.</p>

2.15(C) ELIGIBILITY CRITERIA FOR SPECIALIZED E& M WORKS:

For specialized components of E & M works (Components of work for particular specialized work shall only be considered while calculating the cost of specialized work). The specialized agency should have satisfactorily completed the said specialized work of amount as mentioned below during the last 07 (seven) years. The value of executed works shall be brought to current costing level by enhancing the actual value of work at simple rate of 7% per annum, calculated from the date of completion to previous day of last date of submission of tenders. The bidder should either himself meet the eligibility conditions as mentioned in the table below or otherwise he will have to associate with an agency meeting the eligibility requirements for specialized work. The bidder shall submit details of such agency(s) as given below to the Engineer in Charge of minor component at least one month in advance from taking up specific component.

- 1) Name of Firm
- 2) List of works as given in table below
- 3) Performance certificate from the Client
- 4) Availability of manpower and machineries

Eligibility Criteria for associate specialized Agencies for E & M services components.

Sl. No	Name of the Component	Eligibility criteria	Definition of Similar Work
1.	Internal and External Electrical Installations, UPS System, Illuminated Signage's, street lighting, compound and Foot Path Lighting etc.	One similar completed works costing each of value not less than Rs.21.50 crore OR Two similar completed works costing each of value not less than Rs.16.12crore OR Three similar completed works costing each of value not less than Rs.10.75crore	SITC of Internal and External Electrification works in residential or office buildings.
2	External Electrical Service connections, Main MV/LT Panels in Bldg. and substations, MV/LT cabling and DG set, Earthing system	One similar completed works costing each of value not less than Rs.5.04crore with capacity of individual DG set not less than 80kVA OR Two similar completed works costing each of value not less than Rs.3.78crore with capacity of individual DG set not less than 80kVA OR Three similar completed works costing each of value not less than Rs.2.52crore with capacity of individual DG set not less than 80kVA	SITC of LT/HT Panels, cabling, substation equipment's including DG sets, earthing etc.

3	Lifts	<p>The main contractor shall associate with the one of the Lift manufacturers of Preferred/approved Makes satisfying NIT conditions. No other Associated Agency shall be eligible to execute the work.</p> <p>For lift works, the approved manufacturer only shall carry out the original work.</p>	SITC of LIFTs and associated works
4	Automatic Fire Alarm System, Fire Fighting system & water supply pumping system	<p>One similar completed works costing each of value not less than Rs.6.32crore OR Two similar completed works costing each of value not less than Rs.4.74crore OR Three similar completed works costing each of value not less than Rs.3.16crore</p>	SITC of Fire Alarm System and Fire Fighting System (water based)
5	LAN, Wi-Fi Networking system	<p>One similar completed works costing each of value not less than Rs.2.22crore OR Two similar completed works costing each of value not less than Rs.1.67crore OR Three similar completed works costing each of value not less than Rs.1.11crore</p>	SITC of LAN, Wi-Fi Networking System.
6	Solar Hot Water System	<p>One similar completed works costing each of value not less than Rs.28.91lacs OR Two similar completed works costing each of value not less than Rs.21.68lacs OR Three similar completed works costing each of value not less than Rs.14.45lacs</p>	SITC of Solar Hot water system

7	Stairways and LIFT well Pressurization system	One similar completed works costing each of value not less than Rs.59.3lacs OR Two similar completed works costing each of value not less than Rs.44.47lacs OR Three similar completed works costing each of value not less than Rs.29.65lacs	SITC of LIFT/ Stairways Pressurization system/ Smoke Extraction system/Fresh Air system/Low side HVAC works including AHUS, Ducting works etc.
8	Radiant Cooling System with High Side HVAC Works	One similar completed works costing each of value not less than Rs.5.75Crore OR Two similar completed works costing each of value not less than Rs.4.32Crore OR Three similar completed works costing each of value not less than Rs.2.88Crore	SITC of Radiant Cooling system with High Side HVAC Works including chillers, Cooling Towers and Pumps etc.

Eligibility Criteria of Specialized Agency for Lifts:

- A. The lift manufacturer shall comply with BIS standards, duly certified by the manufacturer itself.
- B. The manufacturer shall be compliant to the Public Procurement (Preference to Make in India). Order 2017 (as amended from time to time) issued by the Department of Industrial Policy and Promotion (DIPP), Ministry of Commerce and Industry. The lift manufacturer shall furnish an undertaking regarding availability of spares for the entire expected life of the lift. e., 15 to 20 years.
- C. The complete lift installation including its components, safety devices, various types of controls etc. testing inspection, operation & maintenance shall confirm to relevant codes, Standards, code of practices, guidelines, safety rules, inspection manual(s), rules issued by Bureau of Indian Standards, as amended up to the last date of receipt of tender
- D. Quality standards shall confirm to latest IS/ISO-9001:2015
- E. The down time of installed lifts being maintained by the manufacturer shall not more than 8 hours (average) in case of minor faults and 7 days (average) in case of major faults during the last one financial year. The manufacturer shall provide undertaking regarding the same.

NOTE: The Main Contractor shall arrange rates from the LIFT OEM for the subsequent 5 years of Comprehensive AMC after completion of DLP.

Eligibility criteria for specialized agency for DG set, Substation works:

- a) The specialized associate agency shall comply the eligibility conditions mentioned in S.No. (2) above.
- b) The Main contractor is also being eligible to carry out himself/ herself any or all of these works without associating any specialized agency provided:

He fulfils the prescribed eligibility criteria respectively for these work(s)
OR

He directly procures the equipment of approved make from manufacturer and gets it installed from authorized agency/service provider of the manufacturer or specialized agency as per criteria mentioned in NIT.

- c) The Main Contractor and the associated specialized agencies give required affidavit to confirm their association.
- d) Engineer in Charge of minor component approves the change of Sub-Agency in case it is required during the currency of the contract.

Consultancy Services for E&M Services:

SCOPE OF SERVICES:

- I. The consultant appointed by the contractor shall provide E & M consultancy services in the following areas:
 - i. All Electrical Engineering services
 - ii. All Mechanical Engineering services
 - iii. Buildings will be designed and constructed as per GRIHA 3-star rating norms. Guidelines given in GRIHA V 2019 shall be followed.
 - iv. All furniture layout / E & M equipment / fixtures/fittings for the building including all rooms and other places as required for these features etc.
 - v. All signage's.
 - vi. All water supply, water pumping system design.
 - vii. All firefighting and Fire Alarm system works.
 - viii. All works including internal Electrical Installation, External Electrification, MV Panels external lighting, facade lighting, routes for service connection, substation works, power distribution in each building, network architecture (for LAN, Wi-Fi networking system), CCTV, Lifts, lighting conductor, DG set, Earthing etc.
 - ix. Electrical load details and Electrical Single line diagrams at substation level as well as building level and flat/room level including complete Internal/External Power distribution scheme.
 - x. All Radiant Cooling System detailed design with complete heat load calculations, DBR etc. for Hostel blocks both at the building level as well as high side HVAC Equipment design at AC Plant.
 - xi. Solar Hot Water system for Hostels.
 - xii. All ELV services including LAN, Wi-Fi, Telephone Networking system.
 - xiii. Any other services specified in this NIT document which are required but not specifically indicated.
- The consultant shall provide comprehensive consultancy services broadly described hereinafter. However, it should be clearly understood that the description of services is only indicative, and the consultant shall be required to perform any other services which may be required whether or not expressly mentioned hereinafter in this contract document of this work up to the entire project requirement and satisfaction of the Institute.
- The consultant shall perform all the Architectural, design of building E&M services etc. by utilizing the most economical, effective and widely accepted engineering concepts/practices and shall at all times show a high degree of professionalism in his work.
- The consultant shall be fully responsible for the design of all the Electrical & Mechanical engineering works.
- All the above mentioned Electrical, Mechanical, ELV, Radiant Cooling/HVAC and allied services

design/drawings, Electrical and Heat load calculations, DBRs etc. prepared by the associate consultant shall be get vetted (including Proof checking) from any one of the approved Third party consultants listed in Appendix-IV by the Main contractor. After vetting(including proof checking) of the design/drawings, the Main contractor shall submit the vetted design/drawings to Engineer-in-charge for final approval of the same. The Main contractor has to enter in to agreement with the Third party consultant.

- The payment to the Third Party consultant shall be made by main contractor directly.

- 2.16 The intending bidder must read the terms and conditions carefully. He should submit his bid if he considers himself eligible and he is in possession of all the documents required
- 2.17 Intending Bidders are advised to keep visiting the above mentioned web-site from time to time (till the last time and date for submission of bids) for any updates in respect of the tender documents, if any. Failure to do so shall not absolve the applicant of his liabilities to submit the applications complete in all respect including updates thereof, if any. An incomplete application may be liable for rejection.
- 2.18 The eligibility (Technical) bid shall be opened first on due date and time as mentioned above. The time and date of opening of financial bids of bidders qualifying the eligibility (Technical) bid shall be communicated to them at a later date.
- 2.19 Pre-bid conference shall be held with the eligible and intending bidders in the office of Superintending Engineer, Construction & Maintenance Division, IIT Hyderabad, Kandi, Sangareddy- 502 284, Telangana State at **10:30 Hrs. on 22-09-2022** to clear the doubts of intending bidders, if any. Bidders should send by email all their queries, one day prior to the date of pre-bid conference i.e. on or before **21-09-2022 16.00 Hrs,**

Email id- ee.civil@iith.ac.in

- 2.20 After pre-bid conference, modifications if required in the bidding documents and clarifications to the queries raised by intending bidders will be issued to all participating bidders by e-mail. Same will also be posted on the website. If further pre-bid conferences are required for complete and effective interactions, the date and time of same will be communicated at the end of 1st pre-bid meeting or later. All modifications/addendums/corrigendum issued regarding this bidding process, shall be posted on website only and shall not be published in any Newspaper.
- 2.21 IIT Hyderabad reserves the right to reject any prospective application without assigning any reason thereof and to restrict the list of qualified bidders to any number deemed suitable by it, if too many bids are received satisfying the minimum laid down criteria.
- 2.22 Contractor must ensure to quote rate of each item.
- 2.23 Intending bidders are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their bids as to the nature of the ground and sub-soil (so far as is practicable), the form and nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their bid. A bidder shall be deemed to have full knowledge of the site whether he inspects it or not and no extra claims / payments consequent on any misunderstanding or otherwise shall be allowed. The bidders shall be responsible for arranging and maintaining at his own cost all materials, tools & plants, water,

electricity, access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of bid implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and local conditions and other factors having a bearing on cost and on the execution of the work.

- 2.24 If any information furnished by the applicant is found incorrect at a later stage, he shall be liable to be debarred from tendering/taking up of works in IIT Hyderabad. The Institute reserves the right to verify the particulars furnished by the applicant independently.
- 2.25 This work required engaging more than 20 nos of labourers / workers and therefore all necessary licenses/ registrations such as labour license, EPFO, ESI, BOCW welfare registration etc., shall be taken by contractor within the time limit prescribed in clause 1 of Schedule – F.
- 2.26 The bid submitted shall become invalid if:
- The bidder is found ineligible.
 - The bidder does not deposit EMD as per NIT.
 - The bidder does not submit the documents as stipulated in the bid document.
- 2.27 List of Documents to be submitted within the period of bid submission.

- EMD in Bank Guarantee of any Scheduled Bank in **Form-H**.
- Letter of Transmittal in **Form-A**
- Certificate of Financial Turnover from CA in **Form -A1**.
- Bank Solvency Certificate in **Form-B**
- List of eligible similar nature of works completed during the last seven years previous day of last date of submission of bid in **Form -C**.
 - If private works are shown in support of eligibility, certified copy of the tax deducted at source certificate (TDS) shall be submitted along with the experience certificate and the TDS amount shall tally with the actual amount of work done).
 - Works executed outside India shall not be considered as eligible works.
- Performance report of works (mentioned in Form-C) may suggested to submit all the details as mentioned at **Form-D**.
- Affidavit for Execution of similar works in Form-E.
- Structure and Organization of the bidder in **Form-F**
- Copy of CPWD enlistment order under composite category Class – I (Super), Class – I (AAA) to be submitted ONLY by CPWD contractors enlisted in composite category Class – I (Super), Class – I (AAA).
- GST registration certificate of the state in which the work is to be taken up, if already obtained by the bidder.

If the bidder has not obtained GST registration in the state in which the work is to be taken up, or as required by GST Authorities, then in such a case the bidder shall submit following undertaking along with other bid document

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

11. Permanent Account Number (PAN) as issued by the Income Tax Department.
12. Integrity Agreement in Form- J
13. Affidavit of Non- Black Listing (Form 'M').

NOTE:

1. All affidavits shall be made in current date after the date of invitation of tender.

2.28 The bid document will include following Six Volumes:

Volume-1

Technical Bid:

**Notice Inviting Tender (NIT),
Instructions to Bidders,
Schedules A to F for the major component (Civil) of the work,
NIT Form and Acceptance
Special Conditions and Additional Conditions of the Contract**

Volume-2

Financial Bid

2 (a) Schedule of Building wise sub-heads (Financial Bid)

**2 (b) PAYMENT SCHEDULE (Building-wise & Sub-head wise % Break-up/ Annexure to
Financial Bid)**

Volume-3

Technical Specifications for Civil Works

Volume-4

Technical specifications for Electrical and Mechanical (E&M) works

Volume-5

Conceptual Drawings & Sub-Soil Investigation Report

Volume-6

General Conditions of Contract 2022 EPC Projects

- 2.29 If the main contractor fails to associate agency/agencies for execution of specialized/minor components of work within prescribed time or furnishes incomplete details or furnishes details of negligible agencies even after the tenderer is given due opportunity, the entire scope of such component of works shall be withdrawn from the tender and the same shall be got executed by the Engineer-in-charge at the risk and cost of the main contractor.
- 2.30 In case the main contractor intends to change any of the above agency/ agencies during the operation of the contract, he shall obtain prior approval of respective Engineer-in- charge. The new agency/ agencies shall also have to satisfy the laid down eligibility criteria. In case Engineer-in- charge of respective discipline is not satisfied with the performance of any agency, he can direct the contractor to change the agency executing such items of work and this shall be binding on the contractor.

- 2.31 The main contractor has to enter into agreement with contractor(s) associated by him for execution of specialized/minor component(s). Copy of such agreement shall be submitted to Engineer in-charge . In case of change of associate contractor, the main contractor has to enter into agreement with the new contractor associated by him.
- 2.32 In case main contractor fails to make the payment to the contractor associated by him within 15 days of receipt of each running account payment then on the written complaint of contractor associated for such specialized/minor component, Engineer- in -charge shall serve the show cause to main contractor and after considering the reply of the same he may make the payment directly to the contractor associated for specialized/minor component as per the terms & conditions of the agreement drawn between main contractor and associate contractor fixed by him, if reply of main contractor either not received or found unsatisfactory. Such payment made to the associate contractor shall be recovered by Engineer-in-Charge from the next RA/final bill due to main contractor as the case may be.

Volume 1:: Section 5

Technical Bid and Bid Forms

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BRIEF PARTICULARS OF THE WORK

SCOPE:

IIT Hyderabad started functioning since August 2008 from its temporary campus located in Sangareddy district. IIT Hyderabad wishes to make a dream campus, a campus that is built on state-of-the-art professional strategies of planning, architecture, design and construction, with equal emphasis on aesthetics, safety and comfort. It must stand befitting the status of a premier institute, offering a role model for other campuses to emulate. The infrastructure of the campus shall be so developed that it allows natural opportunities for interaction between academics of

different disciplines to come together and undertake research on cutting edge interdisciplinary domains.

IIT Hyderabad is planned as a residential campus built on an area of 602 acres to eventually accommodate a total population of 30,000, including 20,000 students with a total built up area of 2.1 million square meters. The campus consists of academic area, residential area for students, residential area for faculty and staff and other support facilities.

The growth of the campus is planned in phases with a corresponding increase in the physical infrastructure and support facilities to accommodate an increase in the number of students in established programs and new programs of the future. IIT Hyderabad campus is envisioned as township that will be self-contained and based on concepts of sustainable development and living.

The master plan for IIT Hyderabad campus has been developed with modular flexibility for expansion to accommodate the future growth.

Phase-1 Campus Construction was started in January 2012 and completed in April 2019 and Phase-2 Campus Construction has been started in March 2019 and is expected to be completed by March 2023. Now IIT Hyderabad intends to start the construction activities for additional buildings for further development and appoint of the contractor for the same.

5.1 The scope of work includes

- Survey and Soil Investigation,
- preparation of working drawings, structural design & drawings, preliminary and shop drawings for all required services (all architectural, structural and services Drawings)
- Vetting of the structural designs and drawings from any IIT.
- obtaining mandatory approvals from local bodies/ authorities required for commencing the work,
- vetting of engineering design and working as well as shop drawings from any approved third party consultants.
- execution of work & services and handing over the assets after making them habitable in all aspects including occupancy certificate from the local bodies/ authorities.

5.2 The bidder has to include cost of services of engaging consultant(s) for accomplishing above tasks. The rates quoted shall be deemed to be inclusive for all the above (**the statutory payments or fees shall be reimbursed by the Institute**) and nothing extra shall be payable on this account. The work is to be executed on **ENGINEERING, PROCUREMENT AND CONSTRUCTION (EPC) (Turn Key) basis in Mode I**. The cost of labour, material, tools and plants and machinery required for execution of the whole project as per Layout plan & detailed design and drawings to be approved, specifications etc. is within the scope of this work. The buildings are to be planned and executed to meet 3 STAR GRIHA.

Building Description:

Sl. No.	Building Names	No. of Blocks	No. of Floors	Built up Minimum plinth area in sqm
1	FT1A- C Type	1	G+12	17,090.89
2	FT1B- C Type	1	G+12	17,090.89
3	ST1A- E Type	1	G+12	8,886.15
4	ST2A- D Type	1	G+12	10,155.60
5	ST2B- D Type	1	G+12	10,155.60
6	Hostel Blocks	3	G+6	15,096.00
Total Built up area in Sqm				78,475.13

The proposed Hostel building is of Ground + 6 structure and Faculty and Staff Housing Towers of Ground + 12 structure configuration. Approximate plinth area of all buildings is 78,475.00 sq. m., and the building foot print is 14,538 sq. m, which has 168 rooms of 3 Nos Hostel Blocks with double occupancy and 72 flats each in 2 faculty and 3 staff housing towers. To bring the building to immediate occupancy, it is proposed to adopt precast technology for construction. For Hostels, each floor will have 12 rooms in each wing and 24 rooms in both the wings. For Staff & Faculty Towers, each floor will have 6 flats. No dining hall is proposed for the hostel and the boarders will use the existing central dining facility.

Note: "Plinth Area" shall have the meaning as given in the code IS: 3861

Note:

- i) The total plinth area of a building shall be sum of plinth area at every floor including basement, if any.
- ii) The mummy and machine room will not be counted as storey and shall not be considered for plinth area calculation.
- iii) Internal sanitary shafts shall not be included in the plinth area in the case of a residential building at any floor level.
- iv) In case of non-residential buildings, plinth area shall not include shafts open to sky. However, the shafts/lift wells covered at top shall be counted at one floor level only.
- v) The area of the mummy at terrace level shall not be included in the plinth area. If a Barsati is provided jointly with mummy then the area of the Barsati excluding mummy at the terrace level shall be included in the plinth area.

- vi) Payment for pergolas, approach ramps, external staircases and space frames shall not be made separately and to be considered in the rate of the building.
- vii) For porticos 50% of the plinth area shall be considered for payment.
- viii) Column projections, slab projections & chajjas beyond wall face shall not be considered in plinth area for payment.
- ix) 50 % of plinth area of Uncovered/ unprotected balcony/ verandah shall be considered for payment.
- x) No separate payment shall be made for any lofts provided.

- 5.2 Schematic layout plan, preliminary architectural concept plan of building, topographical survey and soil test report **in the nearby plot** are attached with bidding documents. These are only indicative just to give idea regarding works. The successful bidder will have to prepare the architectural drawings afresh as per the requirements of the Institute. Similarly, detail survey and soil investigation has to be carried out by the successful bidder after award of work. No claim whatsoever will be entertained in future in this regard.
- 5.3 All works have to be executed as per specifications provided in the bid document, CPWD Specifications 2019 Vol-I & Vol-II with correction slips / additions up to date of submission of bids and National Building Codes 2016 with correction slips / additions up to date of submission of bids (in case of difference if any, stringent / higher specification of the two shall be followed). In absence of CPWD Specification, IS Codes, MoRTH Specifications, National Building Code 2016 Specifications, and sound engineering practices shall be adopted as per order of precedence defined in the contract.
- 5.4 The scope of works & specification are given in general but they are not exhaustive i.e., does not mention all the incidental works required to be carried out for complete execution of the item of work. Since this is an EPC contract, the work shall be carried out, all in accordance with true intent and meaning of the specifications and the drawings taken together, regardless of whether the same may or may not be particularly shown on the drawings and/ or described in the specifications, provided that the same can be reasonably inferred there from. There may be several incidental works, which are not mentioned in the contract document/specifications but will be necessary to complete the item in all respect. All these incidental works/ costs which are not mentioned, but are necessary to complete the work shall be deemed to have been included in the overall amount quoted by the contractor for various components of work. No adjustment of rates shall be made for any variation in quantum of incidental works due to variation/change in actual working drawings. Also, no adjustment of rates shall be made due to any change in incidental works or any other deviation in such element of work (which is incidental to the items of work and are necessary to complete such items in all respects) subject to the provision under clause 12.3 of the contract on account of the directions of Engineer-in-charge .
- 5.5 In case, some of items are missing in the scope of work or specifications in the bidding documents same shall be taken from the specification mentioned in similar type of items mentioned for similar type of buildings in the scope of work or shall be executed as given in the CPWD Specifications, NBC-2016, IS Codes or according to sound engineering practices so as to make the building including related services fully functional. No claim what so ever may be entertained at later stage. All cost of providing and making buildings with services, landscape and horticulture works to the extent specified, fully complete in all aspect unless specifically mentioned in the contract document and making buildings with services fully functional are deemed to be included in the cost tendered for this work.
- 5.6 Tap off locations for drawing the services like water supply, electricity and disposal of sewage will be made available to the contractor. These locations are shown in the masterplan enclosed

with the bid documents. the contractor shall execute all works necessary for these services as per required engineering design. Nothing extra shall be payable.

Note:

1. All works has to be executed as per specifications provided in the bid document, CPWD Specifications and National Building Codes 2016 (in case of difference, if any, stringent / higher specification of the two shall be followed). In absence of CPWD Specification, IS Codes, National Building Code 2016 or sound engineering practices and directions of the Engineer in Charge shall be adopted as per order of precedence defined in the contract.
2. All the equipment/ components for sub-station, DG sets, MV/LT panels, Solar Hot water system , LIFTS, Multi-function meters, Radiant Cooling system/BTU meters, HVAC Chillers and other associated plant room equipment's, Cooling Towers, VFDs, Chiller Plant Manager, CCTV, LAN/Wi-Fi networking system, EPABX, Fire Alarm system, Fire fighting system, Water pumping system, Stairways/LIFT well Pressurization system etc. shall be compatible with third party BMS (BMS is not part of this contract). All the needful interface devices shall be considered under scope of this contract. Nothing extra shall be paid on this account.

5.7 Brief Description of activities: -

The work shall be executed on **Turnkey (Design & Build) basis** involving getting all local body clearances, soil testing, structural design & drawings, constructions & commissioning of buildings & services and obtaining completion in accordance with layout plan and architectural / structural drawings. Scope of work contained in the paras mentioned below is **only indicative and not exhaustive**.

- (1) The Works shall include all Civil, Electrical, Mechanical,HVAC, all Safety Aspects and any other Works required for the Construction and Completion of the Works in all respects and to the Satisfaction of the Engineers – in – charge of major component and minor component.

(2) Local Body Approval: -

- i. Agency shall get the requisite approvals from the local bodies wherever required before start of the work and Fire NOC & Occupancy Certificates after completion of the work also. The contractor shall incorporate any modifications that may become necessary by any of the local bodies, the same shall be carried out by the contractor at his own cost.
- ii. The contractor shall obtain all **mandatory approval and** No Objection Certificate / Consent for Establishment from local body authorities like local Fire department, local town planning authority, local ground water authority, local electricity supply authority, local pollution control board, Forest department, Environment clearance, Lift inspectorate, Central Electricity Authority etc., as may be necessary for the construction and occupancy of the building.
- iii. The contractor has to prepare all the documents as required and submit as per the prescribed rules to the local statutory bodies.

- iv. The contractor shall at his own cost collect field samples and carry out all necessary tests required for submission of necessary applications.
 - v. The contractor has to comply and, if necessary, resubmit applications are required by the local bodies.
 - vi. If required, the contractor has to appoint at his own liasion consultants for obtaining local body approvals.
 - vii. The statutory payments or fees shall be reimbursed by the Institute on Production of Proof of remittance.**
 - viii. Three final copies of the documents prepared shall be submitted to Engineer – in – charge for record. He shall also submit the soft copies in editable format.
 - ix. All the documents created out of the assignment will become the sole property of the Institute.
- (3) The contractor shall get the detailed soil investigation done as per relevant IS code, NBC 2016 etc; as applicable through the **Geotechnical consultant having professional experience of 15 years** and must have carried out soil investigation successfully for at least two similar works & one set of test report shall be deposited with the department. The department may verify the results submitted by agency, if need be.
- (4) Tenderer may satisfy himself by conducting pre – soil tests if he so requires. However, an indicative soil investigation report is submitted for general guidelines of the bidders, although this will not have any being on the quoted by the bidders. Tenderer will be required to conduct detailed soil investigation for carrying out structural design, through Geotechnical consultants as mentioned in **Para 3 above.**

5.8 Structural Design:

- i. Prepare complete **structural design, drawings** for foundation, superstructure and for all other related structures as per provision contained in IS / relevant codes under seismic Zone II.
- ii. The structural drawings shall be got proof checked & vetted from **any of the IITs** by contractor himself and nothing extra shall be paid on this account. If any modification in design / drawings is needed as per site conditions or subsequent to proof checking, the contractor shall do / re do the design without any extra cost. The decision of the Engineer – in – charge in this regard shall be final and binding. No claim whatsoever on this account will be entertained.

5.9 Planning, preparing drawing for internal services and execution of the same i.e. internal sanitary work, water supply work, drainage system etc. complete for the building including all pipes, its fittings, testing etc; complete as approved by department.

- 5.10 Water supply: Water supply lines shall be laid as per scheme prepared, submitted by the contractor and approved by Engineer – in – charge. The same would be implemented as per approval given along with construction of overhead tanks on top of the building.
- 5.11 Planning, designing and construction / installation of underground reservoirs, water gallery, its pump houses for water supply, for firefighting tank including installing of pumps, stand by pumps, DG Sets, as per approved drawings / specifications or as directed by Engineers – in – charge.
- 5.12 Connection charges / fee, if any to be paid to the local bodies or any other agency shall be borne by the institute. The cost of restoration of any services damaged by the contractor during execution shall be borne by him.
- 5.13 Complete levelling / dressing including filling of earth, its supply, disposal of surplus earth as the case may be, is to be completed as directed by the Engineer – in – charge.
- 5.14 Taking all precautionary measures to safeguard against any accident for the contractors’ employees, general public, supervisory staff of IIT Hyderabad by providing necessary safety equipment e.g. MS sheet barricading etc and personnel’s equipment e.g. helmets, safety shoes etc; at work site.
- 5.15 The site has to be kept clean of all debris, rubbish and dirt & surplus / waste material all the time. It also includes maintenance, cleaning & de-silting the drains, pipe lines laid by the agency for all services etc. executed by the agency to the entire satisfaction of the Engineer – in – charge during the construction period. **Deep Cleaning and de-silting** shall also be done by the agency before handing over the completed building to the Institute. All machines, equipment and labour for this purpose shall be arranged by the contractor.
- 5.16 **The Electrical work** as per specifications and scope of work given in the bid document & as per the approved drawings and direction of Engineer-in-charge which includes internal electrical installations fittings, lifts, firefighting, fire alarm system etc; shall be implemented along with civil work in proper coordination.
- 5.17 **Maintenance / defect liability period** would be uniformly **three (3) years** from the date of handing over the building complete in all respects & fit for occupation. During this period, the defects noticed in the work carried out by the contractor shall be removed at his cost. In case he fails to do so after intimation to him in writing by the Engineer – in – charge, the same shall be carried out at his cost.
- 5.18 The **final plinth level** will be decided soon after actual start of work at site. However, the plinth level of the building shall be generally minimum of **450 mm** above the crown of finished road. Changes, if any, in the plinth height would not affect the agreed rate and no claim on this account shall be entertained.
- 5.19 Planning, designing and providing required electrical installations for the proposed building shall be as per latest NBC norms, CPWD specifications and shall include obtaining approval of local bodies wherever required.

5.20 Providing lift of specified capacity as per NBC norms and as specified in the Architectural drawings and standby genset in case of power failure. The scope includes getting the requisite permission of lift from the concerned authority before commissioning of the same.

5.21 Planning designing and providing required firefighting system, for proposed building as per NBC norms and Chief Fire Officer approval including the provision for required capacity underground water tank, overhead tank, pumps, hydrant, extinguisher, sprinklers, provision of refuge area, fire stair case etc; all to the entire satisfaction of the nodal authorities of the Govt. of Telangana.

5.22 Out of total stipulated period, the time limit for Planning & Designing shall be maximum 30 days for Hostel Blocks, 45days for Faculty and Staff Housing Towers . The remaining period shall be for completion of entire work of respective structures fit for habitation as given in the table of milestones for sectional completion.

5.23 Development of Work shall include following items:

- i. Planning, designing, construction, testing and commissioning of manholes including connection of external drainage pipelines up to first manhole/ tap off location.
- ii. Complete levelling up to required setback of a building including disposal of excess soil and / or filling with good earth under OMC. If excavated soil is insufficient or of inferior quality then good earth shall be supplied by the contractor at his own cost and nothing extra shall be payable.
- iii. Planning, design, construction of retaining walls if required for levelling purposes including storm water catch drains for proper drainage of rain water to the rain water harvesting system.
- iv. Cement concrete approach road up to as per architectural drawings and direction of Engineer – in – charge. The concrete to be used shall be vacuum dewatered CC pavement of minimum grade M-30 or as designed and approved by EIC.
- v. Planning, design and construction of underground sump of required capacity for fire and domestic requirement, pump set, water supply main riser complete as per architectural drawings and direction of Engineer – in – charge. Separate pump sets including standby is to be provided for each block.
- vi. Electrical services cable laying up to feeder pillar or tap off location.

5.24 The above scope of work includes cost of all materials, manpower, equipment, T&P, fixtures, accessories, royalties, taxes, watch & ward and all other essential elements for completion and maintenance of works as aforesaid whatsoever. The approval accorded by IIT Hyderabad before acceptance of tender is only for tender evaluation. Any changes, modifications, revisions etc; required to be done in accordance with applicable standards shall have to be done at contractor's cost and nothing extra shall be payable.

5.25 Documentation, Instrumentation, etc.;

- i. All drawings shall be made in Latest Version of AutoCAD and the Soft Copies on CDs and six Hard Copies of Prints of all “Approved Drawings” and “As Built” Drawings shall be supplied by the Contractor to the Engineer – in – charge at Free of cost as per the Approved Program.
- ii. One soft copy in CDs and two hard copies of all approved design calculations shall be submitted by the contractor to the Engineer – in – charge at free of cost as per approved program.
- iii. One soft copy and Three hard copies of “Maintenance Manual” describing Access Arrangements, Important Obligatory Precautions from the Point of View of Structural Safety and Procedure for Minor and Major Repairs of each Component of the Buildings and Layout, Renewals of Finishes and Treatment periodically shall be supplied by the Contractor to the Engineer – in – charge at free of Cost.
- iv. One soft copy and Three hard copies of “Construction Manual” covering various aspects of Construction Methods, Difficulties faced and how they are overcome during execution, etc.; shall be supplied by the contractor to the Engineer – in – charge at free at cost at the time of finalization of work.
- v. Fixing arrangement for internal and external lighting shall be as approved by the employer and executed by the contractor.
- vi. “As built” drawings and shop drawings in soft form and two sets of hard copies shall be submitted up on completion of work.

5.26 GENERAL:

- 5.26.1 Letter of transmittal and forms for deciding eligibility are given in Section -5.
- 5.26.2 References, information and certificates from the respective clients certifying suitability, technical knowledge or capability of the bidder should be signed by an officer not below the rank of Executive Engineer or equivalent.
- 5.26.3 The bidder may furnish any additional information which he thinks is necessary to establish his capabilities to successfully complete the envisaged work. He is, however, advised not to furnish superfluous information. No information shall be entertained after uploading of eligibility criteria document unless it is called for by the Employer.
- 5.26.4 If private works are shown in support of eligibility, certified copy of the tax deducted at source certificate (TDS) shall be submitted along with the experience certificate and the TDS amount shall tally with the actual amount of work done or the bidder may submit such certificate from his Chartered Accountant.

5.27 DEFINITIONS:

- 5.27.1 In this document the following words and expressions have the meaning hereby assigned to them:
- 5.27.2 **EMPLOYER/ Institute/ Department:** Means the Director, IIT Hyderabad, acting through the **Executive Engineer (Civil), Construction & Maintenance Division, IIT Hyderabad.**
- 5.27.3 **User/Client/Owner:** Means Director, IIT Hyderabad, acting through the **Executive Engineer (Civil), Construction & Maintenance Division, IIT Hyderabad.**
- 5.27.4 **Engineer-in-Charge of Major Component** will be the Executive Engineer(Civil),IIT Hyderabad
- 5.27.5 **Engineer-in-Charge of Minor Component** will be the Executive Engineer(Electrical),IIT Hyderabad
- 5.27.6 **BIDDER:** Means the individual, proprietary firm, firm in partnership, limited company (private or public) or corporation.
- 5.27.7 “Year” means “Financial Year” unless stated otherwise.

5.28 METHOD OF APPLICATION:

- 5.28.1 If the bidder is an individual, the application shall be signed by him above his full type written name and current address.
- 5.28.2 If the bidder is a proprietary firm, the application shall be signed by the proprietor above his full type written name and the full name of his firm with its current address.
- 5.28.3 If the bidder is a firm in partnership, the application shall be signed by all the partners of the firm above their full type written names and current address, or, alternatively, by a partner holding power of attorney for the firm. In the later case a certified copy of the power of attorney should accompany the application. In both cases a certified copy of the partnership deed and current address of all the partners of the firm should accompany the application.
- 5.28.4 If the bidder is a limited company or a corporation, the application shall be signed by a duly authorized person holding power of attorney for signing the application accompanied by a copy of the power of attorney. The bidder should also furnish a copy of the Memorandum of Articles of Association duly attested by a Public Notary.

5.29 FINAL DECISION MAKING AUTHORITY

The employer reserves the right to accept or reject any bid and to annul the process and reject all bids at any time without assigning any reason or incurring any liability to the bidders.

5.30 PARTICULARS PROVISIONAL

The particulars of the work given in Section A are provisional. They are liable to change and must be considered only as advance information to assist the bidders.

5.31 SITE VISIT

The bidder is advised to visit the site of work, at his own cost, and examine it and its surroundings to himself collect all information that he considers necessary for proper assessment of the prospective assignment before bidding.

5.32 EVALUATION CRITERIA FOR TECHNICAL QUALIFICATION

The details submitted by the bidders will be evaluated in the following manner.

5.32.1 *The initial criteria for eligibility prescribed in para Vol-I, Part D Section 4 above in respect of experience of similar class of works completed, bidding capacity and financial turn over etc. will first be scrutinized and the bidder's eligibility for the work be determined.*

5.32.2 *The bidders qualifying the initial criteria for eligibility as set out in above para s, will be evaluated by scoring method detailed below on the basis of details furnished by them:*

- | | | |
|-----|--|-------------------------|
| (a) | Financial strength (Form "A"&B) | Maximum 20 Marks |
| | i. Turnover | 16 Marks |
| | ii. Solvency | 4 Marks |
| (b) | Experience in eligible similar nature of work during last Seven years (Form "C") | Maximum 20 Marks |
| | <i>A site visit to the project(s) specified in technical bid may be undertaken by an expert committee to assess the quality of the work.</i> | |
| (c) | Performance on work (Form "D")-
Time over run | Maximum 20 Marks |
| (d) | Performance on work (Form "D")-
Quality | Maximum 40 Marks |

Total 100 Marks

NOTES:

1. *Criteria for evaluation of performance of the contractor is given in Form “K”.*
2. *To become eligible for qualification in technical bid evaluation, the bidder must secure at least fifty percent marks in each attribute (Section a, b,c &d) and sixty percent marks in aggregate.*
3. *The department, however, reserves the right to restrict the list of bidders in technical bid evaluation to any number, as deemed suitable by it.*
4. *The average value of performance of works for time overrun and quality shall be taken on the basis of performance report of the eligible similar works.*

5.32.3 Even though any bidder may satisfy the above requirements, he would be liable to disqualification if he has:

- (a) made misleading or false representation or deliberately suppressed the information in the forms, statements and enclosures required in the eligibility criteria document.
- (b) record of poor performance such as abandoning work, not properly completing the contract, or financial failures/weaknesses etc.

5.33 FINANCIAL INFORMATION

Bidder should furnish the following financial information

- I. Annual Financial Statement for the last five years (in Form “A1”)
- II. Solvency Certificate (in Form “B”).

5.34 EXPERIENCE IN CIVIL WORKS HIGHLIGHTING EXPERIENCE IN SIMILAR WORKS

5.34.1 Bidder should furnish the following:

- (a) List of all works of similar nature successfully completed during the last seven years (in form “C”).
- (b) List of the projects under execution or awarded (in Form “C1”). This information should be complete and no work should be left out.
- (c) (a) Particulars of completed works and performance of the applicant duly authenticated/certified by an officer not below the rank of Executive Engineer or equivalent should be furnished separately for each work completed or in progress (may suggested to submit all the details as mentioned at Form “D”).

5.34.2 *If required IITH Officer (s) may inspect the eligible works as submitted by the agency. The bidder shall coordinate such inspections and provide all necessary documents, information as desired by the visiting officer (s).*

5.35 ORGANISATION INFORMATION

Bidder is required to submit the following information in respect of his organization (in form "F"). The bidder should have sufficient number of Technical and Administrative employees for the proper execution of the contract. The bidder should submit a list of these employees stating clearly how these would be involved in this work with 15 days of award of work.

5.36 CONSTRUCTION PLANT & EQUIPMENT

Bidders should furnish the list of construction plant and equipment including steel shuttering, centring and scaffolding to be used in carrying out the work. Details of any other plant & equipment required for the work not included in agreement and available with the bidder may also be indicated.

5.37 LETTER OF TRANSMITTAL

The bidder should submit the letter of transmittal attached with the document.

5.38 OPENING OF THE FINANCIAL BID

After evaluation of applications, a list of short listed agencies qualified in technical evaluation will be prepared. Thereafter, the financial bids of only the qualified and technically acceptable bidders shall be opened at the notified time, date and place in the presence of the qualified bidders or their representatives. The validity of the tenders shall be **90 days** and shall be reckoned from the date of opening of the Technical Bid.

5.39 AWARD CRITERIA

- 5.39.1 The employer reserves the right, without being liable for any damages or obligation to inform the bidder, to:
- (a) Amend the scope and value of contract to the bidder.
 - (b) Reject any or all of the applications without assigning any reason.
- 5.39.2 Any effort on the part of the bidder or his agent to exercise influence or to pressurize the employer would result in rejection of his bid. Canvassing of any kind is prohibited.

Eligibility and Evaluation Criteria**Criteria for Evaluation of the Performance of Bidder for Pre-Eligibility**

Sl. No	Attributes	Marks	Evaluation			
(a)	Financial Strength (Maximum 20 Marks)		(i) 60% marks for minimum eligibility criteria			
	(i) Average annual Turnover	16 Marks	(ii) 100% marks for twice the minimum eligibility criteria or more.			
	(ii) Solvency Certificate	04 Marks	(iii) In between (i) & (ii)- on pro-rata basis			
(b)	Experience in similar class of work (Maximum 20 Marks)	20 marks	(i) 60% marks for minimum eligibility criteria			
			(ii) 100% marks for twice the minimum eligibility criteria or more.			
(c)	Performance on works [Time Over Run (TOR)]: Maximum 20 marks					
	Parameter	Calculation for points	Score			Maximum Marks
	If TOR =		1.00	2.00	3.00	>3.50
	(i) Without levy of compensation		20	15	10	10
	(ii) With levy of compensation		20	5	0	-5
	(iii) Levy of compensation not decided		20	10	0	0
	TOR = AT/ST, where AT=Actual Time; ST= Stipulated Time.					
	Time in the Agreement plus (+) justified period of extension of time. Note: Marks for value in between the stages indicated above is to be determined by straight line					
(d)	Performance of works (Quality): Maximum 40 Marks					
	(i) Outstanding		40			
	(ii) Very Good		30			
	(iii) Good		20			
	(iv) Poor		0			

Note: Performance of work (Quality) certified as “satisfactory” will be treated as good.

1. *Criteria for evaluation of performance of the contractor is given in Form “K”.*
2. *To become eligible for qualification in technical bid evaluation, the bidder must secure at least fifty percent marks in each attribute (Section a, b, c & d) and sixty percent marks in aggregate.*
3. *The department, however, reserves the right to restrict the list of bidders in technical bid evaluation to any number, as deemed suitable by it.*
4. *The average value of performance of works for time overrun and quality shall be taken on the basis of performance report of the eligible similar works.*

LETTER OF TRANSMITTAL

From:

XXXX

To

**The Executive Engineer (Civil),
Construction and Maintenance Division,
IIT Hyderabad.**

Subject:- Submission of bids for the work of Construction of precast 2Nos Faculty Housing Tower (G\12), 3Nos Staff Housing Towers (G\12) and 3Nos Hostel Blocks (G\6) RCC Structures at IIT Hyderabad, Kandi, Sangareddy.

Sir,

Having examined the details given in **NIT and Bid** document for the above work, I/we hereby submit the relevant information.

1. I/We hereby certify that all the statement made and information supplied in the enclosed forms A to J and accompanying statement are true and correct.
2. I/We have furnished all information and details necessary for eligibility and have no further pertinent information to supply.
3. I/We submit the requisite certified solvency certificate and authorize the Executive Engineer (Civil), , IIT Hyderabad to approach the Bank issuing the solvency certificate to confirm the correctness thereof. I/We also authorize Executive Engineer (Civil), IIT Hyderabad to approach individuals, employers, firms and corporation to verify our competence and general reputation.
4. I/We submit the following certificates in support of our suitability, technical knowledge and capability for having successfully completed the following works:

Sl. No.	Name of work	Amount	Certificate issued by
1			
2			
3			

Certificate

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

Date of submission

**Seal of bidder &
Signature(s) of bidder(s)**

FINANCIAL INFORMATION

Name of the firm/ Bidder.....:

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

Fig in Lakhs Rs

Sl. No.	Particulars	Financial Years				
		2017-18	2018-19	2019-20	2020-21	2021-22
i)	Turnover of construction Works					
ii)	Profit /Loss					

- II. Financial arrangements for carrying out the proposed work.

- III. Solvency Certificate from Bankers of bidder in the prescribed Form "B"

SIGNATURE OF BIDDER(S)

Signature of Chartered Accountant with Seal

FORM OF BANKERS' NET WORTH CERTIFICATE FROM A SCHEDULED BANK

To

The Executive Engineer (Civil),
Construction and Maintenance Division,
IIT Hyderabad.

This is to certify that to the best of our knowledge and information that M/s./Shri

..... having marginally noted address, a customer of our bank are/is
respectable and can be treated as good for any engagement upto a limit of
Rs.....(Rupees.....).

This certificate is issued without any guarantee or responsibility on the bank or any of the
officers. This certificate is valid for six month from the issued of this letter.

(Signature of Branch Manager)

For the Bank NOTE: (1) In case of partnership firm, certificate should include names of all partners
as recorded with the Bank.

DETAILS OF ELIGIBLE SIMILAR NATURE OF WORKS COMPLETED DURING THE LAST SEVEN YEARS ENDING PREVIOUS DAY OF LAST DATE OF SUBMISSION OF TENDER

Sl. No.	Name of work/ project and Location	Owner or sponsoring Organization	Cost of work (in Crores)	Date of commencement as per contract.	Stipulated date of completion	Actual date of completion	Litigation / arbitration pending / in progress with details*	Name and address (Postal & email)/ contact nc of officer	Whether the work was done on back to back basis. Yes/ No
1	2	3	4	5	6	7	8	9	10

***Indicate gross Amount Claimed and Amount Awarded by the Arbitrator.**

**SIGNATURE (S) OF BIDDER
(S) (WITH STAMP)**

LIST OF THE PROJECTS UNDER EXECUTION OR AWARDED

Sl. No.	Name of work/project and Location	Owner or sponsoring Organization	Cost of work (in Crores)	Date of commencement as per contract	Stipulated date of completion	Present Progress (Financial & Physical)	Litigation / arbitration pending in progress with details*	Name and address (Postal no of officer)	Whether the work being done on back to back basis. Yes/No

*Indicate gross Amount Claimed and Amount Awarded by the Arbitrator.

SIGNATURE (S) OF BIDDER (S) (WITH STAMP)

PERFORMANCE REPORT OF WORKS REFERRED IN FORM – C:

(Bidder may suggested to submit the Performance Report with the details covering in this Form-D)

1.	Name of work / Project & Location	
2.	Agreement No.	
3.	Estimated Cost	
4.	Tendered Cost	
5.	Actual Value of work done.	
6.	Date of Start	
7.	Date of completion i) Stipulated Date of Completion (as mentioned in work order)	
8.	ii) Actual Date of Completion	
9.	i) Whether case of levy of compensation for delay has been decided or not	Yes/ No.
10.	ii) If decided, amount of compensation levied for delayed completion, if any.	Yes/ No.
11.	Whether internal water supply is part of the agreement?	Yes/ No.
12.	Whether sanitary installation is part of the agreement?	Yes/ No.
13.	Whether drainage is part of the agreement? Whether	Yes/ No.
14.	internal electrical installation is part of the agreement?	Yes/ No.
15.	?	Yes/ No.
16.	Whether lift is part of the agreement? Whether fire fighting is part of the agreement? Whether HVAC is part of the agreement?	Yes/ No.
	Performance Report	
	1) Quality of Work	Outstanding / Very Good/ Good/ Poor
	2) Financial Soundness	Outstanding / Very Good /Good/Poor
	3) Technical Proficiency	Outstanding / Very Good/ Good/Poor
	4) Resourcefulness	Outstanding / Very Good/ Good/Poor
	5) General Behaviour	Outstanding / Very Good/ Good/Poor
	Dated:	Executive Engineer or Equivalent with office stamp

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FORM "E"

PROFORMA OF AFFIDAVIT FOR EXECUTION OF SIMILAR WORKS

I/We undertake and confirm that eligible similar works(s) has/have not been got executed through another contractor on back to back basis. Further that, if such a violation comes to the notice of Department, then I/we shall be debarred for bidding in IIT Hyderabad in future forever. Also, if such a violation comes to the notice of Department before date of start of work, the Engineer-in-Charge shall be free to forfeit the entire amount of Earnest Money Deposit/Performance Guarantee.

NOTE: Affidavit to be furnished on a 'Non-Judicial' stamp paper worth Rs.100/-

Signature of Bidder(s) or an authorized
Officer of the firm with stamp

Signature of Notary with seal

STRUCTURE & ORGANISATION

1. Name & Address of the bidder
2. Telephone No./Telex No./Fax No.
3. Legal status of the bidder (attach copies of original document defining the legal status).
 - a) An Individual
 - b) A proprietary firm
 - c) A firm in partnership
 - d) A limited company or Corporation
4. Particulars of registration with various Government bodies (attach attested photo- copy).

Organization/Place of registration	<u>Registration No.</u>
a)	
b)	
c)	
5. Names and Titles of Directors & Officers with designation to be concerned with this work.
6. Designation of individuals authorized to act for the organization.
7. Has the bidder, or any constituent partner in case of partnership firm, ever been convicted by a court of law? If so, give details.
8. In which field of Civil Engineering Construction the bidder has specialization and interest?
9. Any other information considered necessary but not included above.

SIGNATURE OF BIDDER(S)

To,

The All Bidders

Dear Sir,

It is hereby declared that IIT HYDERABAD is committed to follow the principle of transparency, equity and competitiveness in public procurement.

The subject Notice Inviting Tender (NIT) is an invitation to offer made on the condition that the Bidder will sign the integrity Agreement, which is an integral part of tender/bid documents, failing which the tenderer/bidder will stand disqualified from the tendering process and the bid of the bidder would be summarily rejected.

This declaration shall form part and parcel of the Integrity Agreement and signing of the same shall be deemed as acceptance and signing of the Integrity Agreement on behalf of the IIT Hyderabad.

Yours faithfully

Executive Engineer (Civil)

To

Executive Engineer (Civil),
IIT Hyderabad

Sub: Construction of precast 2Nos Faculty Housing Tower (G+12), 3Nos Staff Housing Towers (G+12) and 3Nos Hostel Blocks (G+6) RCC Structures at IIT Hyderabad, Kandi, Sangareddy.

Dear Sir,

I/We acknowledge that IIT Hyderabad is committed to follow the principles thereof as enumerated in the Integrity Agreement enclosed with the tender/bid document.

I/We agree that the Notice Inviting Tender (NIT) is an invitation to offer made on the condition that I/We will sign the enclosed integrity Agreement, which is an integral part of tender documents, failing which I/We will stand disqualified from the tendering process. I/We acknowledge that THE MAKING OF THE BID SHALL BE REGARDED AS AN UNCONDITIONAL AND ABSOLUTE ACCEPTANCE of this condition of the NIT.

I/We confirm acceptance and compliance with the Integrity Agreement in letter and spirit and further agree that execution of the said Integrity Agreement shall be separate and distinct from the main contract, which will come into existence when tender/bid is finally accepted by IIT Hyderabad. I/We acknowledge and accept the duration of the Integrity Agreement, which shall be in the line with Article 1 of the enclosed Integrity Agreement.

I/We acknowledge that in the event of my/our failure to sign and accept the Integrity Agreement, while submitting the tender/bid, IIT Hyderabad shall have unqualified, absolute and unfettered right to disqualify the tenderer/bidder and reject the tender/bid in accordance with terms and conditions of the tender/bid.

Yours faithfully

(Duly authorized signatory of the Bidder)

To be signed by the bidder and same signatory competent / authorized to sign the relevant contract on behalf of IIT Hyderabad.

INTEGRITY AGREEMENT

This Integrity Agreement is made at on this..... day of 20.....

BETWEEN

Director, Indian Institute of Technology Hyderabad represented through the Executive Engineer, IITH, (Hereinafter referred as the 'Principal/Owner', which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns)

AND

..... Represented
through.....
(Hereinafter referred to as the (Details of duly authorized signatory) Bidder/Contractor and which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns)

Preamble

WHEREAS the Principal / Owner has floated the Tender No.....
.....(hereinafter referred to as Tender/Bid) and intends to award, under
lai down organizational procedure, contract
for.....
..... hereinafter referred to as the contract.

AND WHEREAS the Principal/Owner values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness/transparency in its relation with its Bidder(s) and Contractor(s). AND WHEREAS to meet the purpose aforesaid both the parties have agreed to enter into this Integrity Agreement (hereinafter referred to as Integrity Pact or Pact), the terms and conditions of which shall also be read as integral part and parcel of the Tender/Bid documents and Contract between the parties. NOW, THEREFORE, in consideration of mutual covenants contained in this Pact, the parties hereby agree as follows and this Pact witnesses as under:

Article 1: Commitment of the Principal/Owner

1. The Principal/Owner commits itself to take all measures necessary to prevent corruption and to observe the following principles:
 - (a) No employee of the Principal/Owner, personally or through any of his/her family members, will in connection with the Tender, or the execution of the Contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
 - (b) The Principal/Owner will, during the Tender process, treat all Bidder(s) with equity and reason. The Principal/Owner will, in particular, before and during the Tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential / additional information through which the Bidder(s) could obtain an advantage in relation to the Tender process or the Contract execution.

- (c) The Principal/Owner shall endeavor to exclude from the Tender process any person, whose conduct in the past has been of biased nature.
2. If the Principal/Owner obtains information on the conduct of any of its employees which is a criminal offence under the Indian Penal code (IPC)/Prevention of Corruption Act, 1988 (PC Act) or is in violation of the principles herein mentioned or if there be a substantive suspicion in this regard, the Principal/Owner will inform the Chief Vigilance Officer and in addition can also initiate disciplinary actions as per its internal laid down policies and procedures.

Article 2: Commitment of the Bidder(s)/Contractor(s)

1. It is required that each Bidder/Contractor (including their respective officers, employees and agents) adhere to the highest ethical standards, and report to the Government / Department all suspected acts of fraud or corruption or Coercion or Collusion of which it has knowledge or becomes aware, during the tendering process and throughout the negotiation or award of a contract.
2. The Bidder(s)/Contractor(s) commits himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the Tender process and during the Contract execution:
 - (a) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal/Owners employees involved in the Tender process or execution of the Contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the Tender process or during the execution of the Contract.
 - (b) The Bidder(s)/Contractor(s) will not enter with other Bidder(s) into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to cartelize in the bidding process.
 - (c) The Bidder(s)/Contractor(s) will not commit any offence under the relevant IPC/ PC Act. Further the Bidder(s)/ Contractor(s) will not use improperly, (for the purpose of competition or personal gain), or pass on to others, any information or documents provided by the Principal/ Owner as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
 - (d) The Bidder(s)/ Contractor(s) of foreign origin shall disclose the names and addresses of agents/ representatives in India, if any. Similarly, Bidder(s)/ Contractor(s) of Indian Nationality shall disclose names and addresses of foreign agents/ representatives, if any. Either the Indian agent on behalf of the foreign principal or the foreign principal directly could bid in a tender but not both. Further, in cases where an agent participates in a tender on behalf of one manufacturer, he shall not be allowed to quote on behalf of another manufacturer along with the first manufacturer in a subsequent/ parallel tender for the same item.
 - (e) The Bidder(s)/Contractor(s) will, when presenting his bid, disclose (with each tender as per proforma enclosed) any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the Contract.
3. The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.

4. The Bidder(s)/Contractor(s) will not, directly or through any other person or firm indulge in fraudulent practice means a wilful misrepresentation or omission of facts or submission of fake/forged documents in order to induce public official to act in reliance thereof, with the purpose of obtaining unjust advantage by or causing damage to justified interest of others and/or to influence the procurement process to the detriment of the Government interests.
5. The Bidder(s)/Contractor(s) will not, directly or through any other person or firm use Coercive Practices (means the act of obtaining something, compelling an action or influencing a decision through intimidation, threat or the use of force directly or indirectly, where potential or actual injury may befall upon a person, his/her reputation or property to influence their participation in the tendering process).

Article 3: Consequences of Breach

Without prejudice to any rights that may be available to the Principal/ Owner under law or the Contract or its established policies and laid down procedures, the Principal/Owner shall have the following rights in case of breach of this Integrity Pact by the Bidder(s)/ Contractor(s) and the Bidder/ Contractor accepts and undertakes to respect and uphold the Principal/Owners absolute right:

1. If the Bidder(s)/Contractor(s), either before award or during execution of Contract has committed a transgression through a violation of Article 2 above or in any other form, such as to put his reliability or credibility in question, the Principal/Owner after giving 14 days notice to the contractor shall have powers to disqualify the Bidder(s)/Contractor(s) from the Tender process or terminate/ determine the Contract, if already executed or exclude the Bidder/ Contractor from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of transgression and determined by the Principal/Owner. Such exclusion may be forever or for a limited period as decided by the Principal/Owner.
2. Forfeiture of EMD/ Performance Guarantee/ Security Deposit: If the Principal/ Owner has disqualified the Bidder(s) from the Tender process prior to the award of the Contract or terminated/ determined the Contract or has accrued the right to terminate/ determine the Contract according to Article 3(1), the Principal/ Owner apart from exercising any legal rights that may have accrued to the Principal/ Owner, may in its considered opinion forfeit the entire amount of Earnest Money Deposit, Performance Guarantee and Security Deposit of the Bidder/ Contractor.
3. Criminal Liability: If the Principal/Owner obtains knowledge of conduct of a Bidder or Contractor, or of an employee or a representative or an associate of a Bidder or Contractor which constitutes corruption within the meaning of IPC Act, or if the Principal/Owner has substantive suspicion in this regard, the Principal/Owner will inform the same to law enforcing agencies for further investigation.

Article 4: Previous Transgression

1. The Bidder declares that no previous transgressions occurred in the last 5 years with any other Company in any country confirming to the anti-corruption approach or with Central Government or State Government or any other Central /State Public Sector Enterprises in India that could justify his exclusion from the Tender process.
2. If the Bidder makes incorrect statement on this subject, he can be disqualified from the Tender process or action can be taken for banning of business dealings/ holidaylisting of the Bidder/Contractor as deemed fit by the Principal/ Owner.
3. If the Bidder/Contractor can prove that he has resorted / recouped the damage caused by him and has installed a suitable corruption prevention system, the Principal/Owner may, at its own discretion, revoke the exclusion prematurely.

Article 5: Equal Treatment of all Bidders/Contractors/Subcontractors

1. The Bidder(s)/Contractor(s) undertake(s) to demand from all subcontractors a commitment in conformity with this Integrity Pact. The Bidder/Contractor shall be responsible for any violation(s) of the principles laid down in this agreement/Pact by any of its Sub- contractors/sub-vendors.
2. The Principal/ Owner will enter into Pacts on identical terms as this one with all Bidders and Contractors.
3. The Principal/Owner will disqualify Bidders, who do not submit, the duly signed Pact between the Principal/Owner and the bidder, along with the Tender or violate its provisions at any stage of the Tender process, from the Tender process.

Article 6- Duration of the Pact

This Pact begins when both the parties have legally signed it. It expires for the Contractor/Vendor 12 months after the completion of work under the contract or till the continuation of defect liability period, whichever is more and for all other bidders, till the Contract has been awarded.

If any claim is made/lodged during the time, the same shall be binding and continue to be valid despite the lapse of this Pacts as specified above, unless it is discharged/determined by the Competent Authority, IIT HYDERABAD.

Article 7- Other Provisions

1. This Pact is subject to Indian Law, place of performance and jurisdiction is the Head-quarters of the IITH of the Principal/Owner, who has floated the Tender.
2. Changes and supplements need to be made in writing. Side agreements have not been made.
3. If the Contractor is a partnership or a consortium, this Pact must be signed by all the partners or by one or more partner holding power of attorney signed by all partners and consortium members. In case of a Company, the Pact must be signed by a representative duly authorized by board resolution.
4. Should one or several provisions of this Pact turn out to be invalid; the remainder of this Pact remains valid. In this case, the parties will strive to come to an agreement to their original intentions.
5. It is agreed term and condition that any dispute or difference arising between the parties with regard to the terms of this Integrity Agreement / Pact, any action taken by the Owner/Principal in accordance with this Integrity Agreement/ Pact or interpretation thereof shall not be subject to arbitration.

Article 8- LEGAL AND PRIOR RIGHTS

All rights and remedies of the parties hereto shall be in addition to all the other legal rights and remedies belonging to such parties under the Contract and/or law and the same shall be deemed to be cumulative and not alternative to such legal rights and remedies aforesaid. For the sake of brevity, both the Parties agree that this Integrity Pact will have precedence over the Tender/Contact documents with regard any of the provisions covered under this Integrity Pact.

IN WITNESS WHEREOF the parties have signed and executed this Integrity Pact at the place and date first above mentioned in the presence of following witnesses:

..... (For and on behalf of Principal/Owner)

..... (For and on behalf of Bidder/Contractor)

WITNESSES:

1 (signature, name and address)

2 (signature, name and address)

Place:

Date:

PROFORMA OF AFFIDAVIT FOR NON - BLACK LISTING

I/we undertake and confirm that our firm/partnership firm has not been blacklisted by any state/Central Departments/PSUs/Autonomous bodies during the last 7 years of its operations. Further that, if such information comes to the notice of the department then I/we shall be debarred for bidding in IIT Hyderabad in future forever. Also, if such an information comes to the notice of department on any day before date of start of work, the Engineer-in-charge shall be free to cancel the agreement and to forfeit the entire amount of Earnest Money Deposit/Performance Guarantee (Scanned copy of this notarized affidavit to be submitted at the time of submission of bid)

NOTE: Affidavit to be furnished on a 'Non-Judicial' stamp paper worth Rs.100/-

Signature of Bidder(s) or an authorized
Officer of the firm with stamp

Signature of Notary with seal

Appendices

Appendices

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ESTABLISHMENT OF SITE LABORATORY AND TESTING OF MATERIALS

Equipment for conducting necessary tests as per CPWD Specifications 2019 Volume-I) shall be provided and installed at site / at precast fabrication yard in the well-furnished field laboratory by the agency at his own cost. The following laboratory equipment should be in general or as and when required be set up at site laboratory: -

Sl. No.	Equipment	Numbers
1.	100MT compression testing machine, electrical-cum-manually operated)	1
2.	Slump cone, steel plate, tamping rod, steel scale, scoop	5
3.	Vicat Apparatus with Desk pot	1
4.	Megger & earth resistance tester	1
5.	Pumps and pressure gauges for hydraulic testing of pressure	2
6.	Weighing scale platform type 100 Kg	2
7.	Graduated glass measuring cylinder of various capacity	As per requirement
8.	Sets of sieves of 450mm internal dia for coarse aggregate [100mm, 80mm, 40mm, 2mm, 12.5mm]	3 sets
9.	Sets of sieves of 200mm internal dia for fine aggregate [4.75mm; 2.36mm; 1.18mm; 600microns; 300 microns & 150 micron, with lid and pan]	3 sets
10.	Sieve Brushes and sieve shaker capable of 200mm and 300mm dia sieves, manually operated with timing switch assembly	1
11.	Cube moulds size 150mmx150mmx150mm	30
12.	Ultrasonic Test Equipment (For concrete)	1
13.	Hot air oven temp. Range 50°C to 300°C-sensitivity 1 degree	1
14.	Electronic balance 600gx0.1g., 10kg and 50 kg	1each
15.	Physical balance weight up to 5 kg	1
16.	Digital thermometer up to 150oc	2
17.	Measuring jars 100ml, 20ml, 500ml	5 Nos each size
18.	Gauging trowels 100mm & 20mm with wooden	3
19.	Spatula 100mm & 20mm with long blade wooden handle	3
20.	Vernier calipers 12" & 6" size	2 each
21.	Digital PH meter least count 0.01mm	2 each
22.	Digital Micrometer least count. 0.01mm	1 each
23.	Digital paint thickness meter for steel 500 microns	1
24.	GI tray 600x450x50mm, 450x300x40mm, 300x250x40mm	3 Nos each
25.	Electric Motor mixer 0.25 cum capacity	1
26.	Rebound hammer test digital rebound hammer	2
27.	Screw gauge 0.1mm-10mm, least count 0.05	2
28.	Water testing kit	1
29.	Motorized sieve shaker	1
30.	Pruning Rods 2 Kg weight length 40 cm and ramming face 25 mm2	1
31.	Extra Bottom plates for 15 cm cube mould	10

32.	Dial type spring balance preferable with zero correction knob capacity 100 kgs. Reading to ½ kg.	1
33.	Iron Weight of 5 kg, 2 kg, 1 kg, 500 gm, 20 gm, 100 gm	1 set
34.	Brass Weight of 50 gm, 2 gm, 10 gm, 5 gm, 2 gm, 1 gm	As per requirement
35.	Measuring cylinder TPX or Poly propylene capacity 100 ml, 500 ml, 250 ml, 100 ml	As per requirement
36.	Pyrex, corning or Borosil beakers with cover capacity 500 ml, 20 ml, 50 ml	As per requirement
37.	Wash Bottles capacity 500 ml	As per
38.	Hammer 1lb& 2lb	1 each
39.	Distance metre (of 100 metre)	5
40.	Hacksaw with 6 blades	5
41.	Measuring tape (5 metre)	10
42.	Shovels & Spade	10
43.	Steel plates 5 mm thick 75x75 cm	As per
44.	Plastic or G.I. Buckets 15 ltr, 10 ltr, 5 ltr	As per
45.	Wheel Barrow	As per
46.	Floor Brushes, hair dusters, scrappers, wire brush, paint brushes, shutter steel plat oil, kerosene with stove etc.	As per requirement
47.	Any other equipment for site tests as outlined in BIS codes and as directed by the Engineer-in-charge.	As per requirement
48.	Concrete Core cutter Machine	1
49.	Proctor Compaction and Density Equipment	1
50.	Field Density Test Apparatus by Sand Replacement Method	1
51.	Wet Film Thickness Gauge (Elcometer make or equipment)	5

Note: 1. The above list is only indicative and not exhaustive. The Bidder may be required to deploy more T&P as per requirement of work.

2. All the above plants & equipment's are to be deployed as and when required or directed by Engineer-in-Charge.

Appendix-II

REQUIREMENTS OF PLANT AND EQUIPMENT AT SITE & PRECAST YARD/FACTORY

Sl. No.	Equipment	Numbers
1.	Concrete batching plant of minimum capacity 30 cum per Hour or 60 cum per Hour at Factory	1
2.	Concrete batching plant of minimum capacity 18 cum per Hour at site	1
3	Boom Placer	1
3	Transmit Mixers either 6 or 7 cum	2
2.	Top Slewing Tower Cranes with Maximum Capacity of 16 Ton or as per the Maximum Tip capacity required to erect the gable end panels and as per Directions of Engineer In-charge	8
3.	Double Girder Gantry Cranes of 10 Ton Capacity or as per the actual site requirement as per the directions of Engineer In-charge	3
4.	Double Girder EOT Cranes of 10 Ton Capacity or as per the actual site requirement as per the directions of Engineer In-charge	3
5.	Excavator cum loader (JCB 3D model or equivalent).	3
6.	DG set of minimum capacity 62.5 KVA.	3
7.	Pan Mixer for Grout Preparation	10
8.	Needle Vibrators.	5
9.	Screed leveler.	3
10.	Plate Vibrator	3
11.	Dumper/Tipper	3
12.	Reinforcement cutting machine.	3
13.	Power driven earth rammer (Soil compactor).	3
14.	Total station.	9
15.	Auto Level	9
16.	Water tanker (Minimum capacity of 5000 liters)	2
17.	Welding machine 400 Ampere	3
18.	Screenner for coarse sand and fine sand	4

19.	Centrifugal mono block water pump minimum capacity 2 HP	9
20.	Road roller 8 to 10 tonnes	1
21.	Vibratory roller	1
22.	Drilling machine	5 Nos.
23.	Shuttering with necessary props	As per requirement
24.	Double steel scaffolding and staging materials	As per requirement
25.	Air compressor	3 Nos.
26.	Floor grinding/polishing machines	9 Nos.
27.	Granite cutting machine	9 Nos.
28.	Ceramic tile cutting machine	10 Nos.
29.	Granite polishing machine	9 Nos.
30.	Mobile crane	As per requirement
31.	Lap Top Computers (All in one)	6 Nos.
32.	Vacuum dewatering machine for concrete	3 Nos
33.	Vehicles with driver for movement of engineers & supervisors from one building to other for supervision, coordination with various agencies and delivery of samples for Third Party Labs	4 seater Executive Vehicle – 3 numbers
34.	Smart Phones (with Data Pack) for communication and instant photos	As per Actual Requirement
35.	Good quality Camera for taking photographs and video recording of major activities for record purpose and for quality assurance.	2 Nos.
36.	Any other machinery required for completion of the work as per decision of Engineer-in-charge.	As per Actual Requirement

Note: 1. The above list is only indicative and not exhaustive. The Bidder may be required to deploy more T&P as per requirement of work.

2. All the above plants & equipment's are to be deployed as and when required or directed by Engineer-in-Charge.

Appendix-III

List of Minimum number of Testing Equipment's to be kept at site for Electrical & Mechanical works

- 1) Megger 2 nos.
- 2) Earth Tester 2 nos.
- 3) Lux meter 2 nos.
- 4) Wire Gauge 2 nos.
- 5) Multi meter 2 nos.
- 6) Vernier Calipers 2 nos.
- 7) Tong Tester 2 nos.

**LIST OF APPROVED THIRD PARTY CONSULTANTS FOR VETTING MEP
DESIGN AND DRAWINGS (including Proof Checking)**

Sl. No	Name of Agency
1	Tata Consulting Engineers Limited, Pune
2	TATA Projects Limited, Mumbai
3	Sterling and Wilson Pvt. Ltd., Mumbai
4	QDC India Consulting Private Limited, Bengaluru
5	Ambrosia Design, Mumbai
6	Consistent Engineering Consultants, Mumbai
7	Semac Consultants Pvt. Ltd., Bengaluru
8	AECOM, India