

**NATIONAL INSTITUTE OF PHARMACEUTICAL
EDUCATION AND RESEARCH HYDERABAD
(NIPER-HYDERABAD)**

Notice Inviting Tender (NIT) *in E-TENDER mode only through Central Public Procurement Portal (CPPP) of Government of India under Two-Cover Bid System*

for

**Providing Third party quality assurance (TPQA) service for various
construction works at permanent campus of
NIPER HYDERABAD**

TENDER NO- PUR/NIPERHYD/NON-CON/ 99/22

**Director
National Institute of Pharmaceutical Education & Research
Hyderabad (NIPER-HYDERABAD)
Near IDPL, Balanagar Hyderabad, Telangana 500037**

**Website: www.niperhyd.ac.in
CPPP Website for e-tender submission
<https://eprocure.gov.in/eprocure/app>**

NOTICE INVITING TENDER (NIT)

National Institute of Pharmaceutical Education and Research Hyderabad (NIPER-HYD) invites reputed and experienced organizations (like Central Govt. PSUs, IITs, NITs etc) for Providing Third Party Quality Assurance (TPQA) Service for various Construction Works at Permanent Campus of Pharmaceutical Education and Research Hyderabad (NIPER-HYD) to submit their bid in e-tender mode only through Central Public Procurement Portal (CPPP) of Govt of India, for which website address is as follows: <https://eprocure.gov.in/eprocure/>

Eligibility conditions given in the bid document with other terms & conditions are also appended below and are to be submitted with Tender Fee as given in tender document:

1.	NOTICE No.	PUR/NIPER-HYD/ NON-CONS/99/22
2.	Mode of Tendering	Two bid system (Technical and Financial bids separately)
3.	Name of Work / Job	Providing Third Party Quality Assurance (TPQA) Service for various Construction Works at Permanent Campus of Pharmaceutical Education and Research Hyderabad (NIPER-HYD)
4.	Contracted value of the Project	Rs.80 Cr. (Estimated)
5.	Address of the Client	Registrar, NIPER Hyderabad, Near IDPL, Balanagar Hyderabad – 500037 Telangana email: sp.niperhyd@gov.in
6.	Tender Fee DD as INR (Non-refundable)	Rs.1000/- (In favour of NIPERH Resources)
7.	EMD DD as INR	2,00,000/-(Two lakhs only)
8.	Performance Bank Guarantee (PBG)	3% of the total value of the TPQA fee in the form of Bank Guarantee
9.	Date & Time of commencement of Bidding	23 Sept 2022 (05.00pm)
10.	Date and Time of Pre-bid meeting	03 Oct 2022(monday,11:00 am) at NIPER Hyderabad
10.	Last date and Time for online submission (uploading) of tender	13 Oct 2022 (03.00 pm)
11.	Date and Time of Opening of Tender (Technical bids)	14 Oct 2022 (03:00 pm)
13.	Date and Time for Technical Presentation by the Qualified bidders	Will be intimated later on CPP Portal
14.	Date and Time of opening of Tender (Financial Bid)	Will be intimated later on CPP Portal
12.	Submission of bids	e-Tender mode only through Central Public Procurement Portal(Govt. of India): https://eprocure.gov.in/eprocure/app For contact details see: http://www.niperhyd.ac.in
13.	Period of Contract	The Contract shall initially be for a period of two years/normal period of project and may be extended further on six monthly basis, subject to satisfactory performance, on the same terms and conditions.
14.	Tender Document	The tender document may be downloaded from and http://www.niperhyd.ac.in https://eprocure.gov.in/eprocure/app from 23/09/2022 to 13/10/2022
15.	Site Inspection (if required)	24 Sept – 10 Oct 2022 (Except Saturday & Sunday) between 10.00 am to 05:00 pm

At any time prior to the deadline for submission of bids, this Institute reserves the right to amend the tender documents / terms by issuing addendum or corrigendum on the website only. The prospective bidders are advised to keep checking the institutes / CPP website for any update in respect of this tender.

NAME OF THE WORK: PROVIDING THIRD PARTY QUALITY ASSURANCE (TPQA) SERVICE FOR VARIOUS CONSTRUCTION WORKS AT PERMANENT CAMPUS OF NATIONAL INSTITUTE FOR PHARMACEUTICAL EDUCATION AND RESEARCH HYDERABAD (NIPER-HYD)

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1.0 Background

NIPER Hyderabad at Balanagar, Hyderabad is developing its permanent campus at Balanagar, near IDPL factory Hyderabad covering areas listed in clause 15 below having buildup area of around 22,200 Sq.m. The Project Management Consultant of the project is M/s NPCC (National Projects Construction Corporation Ltd) and the building design works are being carried out by different Architect Consultants engaged by PMC.

NIPER-hyd desires to engage a professional organization to take up third party quality assurance (TPQA).

2.0 Aim & Objectives of TPQA

The main aim of the TPQA firm will be to act as an onsite representative of NIPER-hyd during construction to ensure adherence to technical specifications, monitor quality of material, quality of workmanship, checking and certifying the bills prepared by the contractor and certified by the PMC, and vetting of BoQs and tender documents etc.

The Objectives are:

1. To monitor that construction is carried out as per the processes, sequencing, and quality control measures mentioned in the agreement between M/s NPCC (hereafter referred as PMC) and the contractor, and method statements submitted by Contractor to PMC.
2. To inspect the site, generate reports and highlight areas of concern w.r.t timely completion of quality of materials, workmanship and finishing at all stages of construction.
3. To inspect, that construction is carried out as per drawings & specifications issued by the Architect & other Consultants.
4. To monitor dimensional and geometrical integrity, material and system integrity, performance and constructional integrity and visual and textural integrity, etc.
5. To do vetting of tender documents and Bills of Quantities prepared by PMC and report if any changes required.

3.0 Eligibility Terms & Conditions

- 1 **Technical Bid (Part-1): Initial Criteria for Eligibility:** Consultant(s) who fulfill the following requirements shall be eligible for bidding: **Joint ventures are not accepted.**

A. The consultants should have satisfactorily completed consultancy services related to TPQA (Third Party Quality Assurance)

- (i) Three similar works of at least Rs.32 Cr each in central / state / PSU / autonomous /institutes of national/international repute.

OR

- (i) Two similar works of at least Rs.48 Cr each in central / state / PSU / autonomous /institutes of national/international repute.

OR

- (i) One similar work of at least Rs.64 Cr each in central / state / PSU / autonomous /institutes of national/international repute.

During the last **Seven years** ending March 2022.

“Similar work” shall mean “Architectural, Structural Design and all Engineering Services for Institutional buildings campus / Commercial buildings campus”.

“Satisfactorily Completed Consultancy work” shall mean completion of construction of project for which consultancy assignment has been executed.

However, if consultant has been debarred/blacklisted by the client the bidder, shall not be considered for eligibility.

Bidder should not have been debarred/ blacklisted by any Government department/organization/PSU till the last date of submission of bids. (Self-certification to this regard be provided on company’s letter head)

- A) The bidder should have an average annual Financial Turnover (Gross) on consultancy works of minimum **Rs.01 Cr** during three consecutive years ending March 2022. At the time of submission of bid consultant/ firm must upload affidavit/ certificate from CA mentioning financial turnover of last 3 years. Further details including copies of balance sheets can be demanded later on after opening of technical bids, so the bidders should keep them ready.
- B) The bidder should not have incurred loss in more than two years during last five consecutive financial years ending March 2022 dully certified by audited by CA.
- C) Bidder should have a solvency of **Rs.60 Lacs**
- D) The Consultant(s) should be an Indian consultancy firm and he should be registered with the council of Architecture or the consultant should have employed Architects registered with council of Architecture. The consultant(s) should have in-house architectural capabilities with minimum experience of 10 years or the consultant should have employed Architects with minimum experience of 10 years and on regular employment with the consultant for minimum 3 years.
- E) Any other document as per requirement of this bid documents.
- F) **A pre-bid meeting shall be held at NIPER-HYD, Balanagar on 03 Oct 2022 (monday,1100 am), the meeting will be conducted in Offline/online mode,** for clarifications relating to the work or bid document, if any.
- G) The intending Bidder must read the terms and conditions of the bid document carefully. He should only submit his bid if he considers himself eligible and he is in possession of all the documents required.
- H) This notice inviting Bid shall form a part of the contract document. The successful Bidder/Bidder, on acceptance of his Bid by the Accepting Authority shall sign the contract within 10 days from the stipulated date of start of the work.
- I) Information and instructions for bidders posted on website shall form part of bid documents. The plans, specifications, the schedule of quantities of various types of items to be executed, scope of work and the set of terms and conditions of the contract to be complied with and other necessary documents can be seen and referred at the office of NIPER, Hyderabad.
- J) The Bid Document as uploaded can be viewed and downloaded free of cost by anyone including intending bidder. The bid to be submitted along with necessary and required documents and other documents specified in the NIT.
- K) **Certificate of Financial Turnover:** At the time of submission of bid, bidder should provide affidavit/ certificate from CA mentioning his Financial Turnover of last 3 years (2019-20,2020-21,2021-2022) or for the period as specified in the bid document and in the format specified in this bid document. Further details if required shall be asked from the bidder after opening of technical bids. **There is no need to attach the entire balance sheets.**
- L) GST Registration Certificate of the state (Telangana) in which work is to be taken up.
- M) Details on Company letter head of current contact address, phone no., mobile no. and e-mail ID of the bidder.
- N) **Financial Bid:** Should be submitted in a separate cover dully marked Financial Bid on the Cover with the name (Firm) and address of the bidder and **the TPQA fee should be quote as % of the contracted value (Rs.80 cr) of the project (maximum capped to 1%) as stated in para 4 of NIT. The format is attached at para 16.0.**

4.0 Instruction to the Bidders

Submission of Bid:

Tender documents (Two bid system – Technical & Financial)

The Tender document can be downloaded from CPPP website:

<https://eprocure.gov.in/eprocure/app>. It may be noted that all subsequent notifications, changes and amendments on the project/document would be posted only on the same website: <https://eprocure.gov.in/eprocure/app>.

The bidders will be required to register themselves with the CPPP, in order to participate in the bidding, for which above website may please be consulted. NIPER Hyderabad has no role in creation of user ID for bidders for using CPPP

Submission

submit online Bids through Central Public Procurement Portal (CPPP) only.

OPENING OF TENDER:

The tenders shall be opened by the committee on schedule date and time in the presence of the bidders who choose to be present. First, technical bid will be opened, then the presentation of the qualified bidder will be scheduled.

The schedule of opening financial bid of those tenders who are found technically qualified in first stage will be informed through CPP portal.

Financial bids of those tenders found to be technically not qualified will not be addressed.

MISCELLANEOUS:

Any attempt to negotiate directly or indirectly on the part of the bidder with authority competent to finally accept the Tender, or influence the acceptance of the tender by any means will result his tender excluded from consideration.

The Director, NIPER-hyd or any other authorized officer of the Institute reserves the right to reject any or all the tenders without assigning any reason thereof.

Conditional tender, illegible and ambiguous tender, partially filled tender, incomplete tender and tender without enclosing aforementioned documents will summarily be rejected.

5.0 Scope of Work

The tentative brief scope of the work and expected quality assurance and suggested activities which may be modified before award of the work are as under:

1. Study the processes, sequencing, and quality control measures mentioned in the agreement document between PMC and contractor, and method statements submitted by Contractors to PMC. Offer suggestions / comments, if any, for corrective measures.
2. Review contractors work program and advise the need on corrective measures on regular basis (**at least 5-6 visits per month or day to day basis as per required by NIPER-Hyd**)
3. Develop operating procedures & protocols for Inspection and monitoring workmanship and finishes: The consultant shall develop operating procedures, protocols and formats including hold and witness points that would be used for meeting the objectives. These will include formats for monitoring and reporting; formats for carrying out quality audit including checklist of various components of works, frequency of quality audit at various level, scheduling of audit, reporting and follow up procedures etc.
4. Before the construction, examine all execution / good for construction drawings (architectural, structural, services, infrastructure and landscape etc), specifications,

- execution detail; highlight any ambiguity or conflicts which may create challenges in execution and finishing to NIPER-hyd project. There might be more than one Architect Consultants.
5. During construction, inspect, document & report if the construction is not being carried out as per drawings & specifications issued by the Architect & other Consultants.
 6. During construction, undertake inspection, document and submit periodic Quality Assurance reports. These reports should highlight any non-conformity, deviation & shortfalls in the processes, sequencing, and method statements w.r.t workmanship & quality control measures.
 7. Recommend / advising stopping the work **to PMC, Contractor & NIPER-hyd if there are any instance of deviations from accepted quality of construction materials, workmanship and general quality of works at appropriate stages of construction.**
 8. At every stage of construction NIPER-hyd shall be kept informed of the progress of the work.
 9. **Verification of running (RA) bills and final bill received from the PMC and authorization for making payments thereof.**
 10. To highlight works that need to be rejected w.r.t quality of workmanship and finishing at all stages of construction. This includes but not limited to inspection of:
 - a. **Dimensional and geometrical integrity:** Works that are dimensionally inaccurate or out of line and level
 - b. **Material and system integrity:** Inspecting performance standards as applicable for materials, components (such as window-systems/door systems, tiling, fixing protocol for fittings etc.)
 - c. **Performance and constructional integrity at junctions where two different materials meet:** Junctions between two elements (Ex: Expansion joints, false ceiling / frame meets wall etc.)
 - d. **Visual and textural integrity of each material and surfaces:** Any foreign materials deposit, defacement of surfaces, blemishes on any surface/component/material (Cement on tile/paint on window frame/ scratches on window/blemish on stone etc.).
 11. Recommend independent Lab testing of any specific lot of materials to PMC.
 12. Periodically inspect and report the adequacy and competence of PMC Contractor's site engineers, skilled labor and constructions tools and recommend changes for improvements.
 13. Track if the construction is going on as per pre decided time schedules, and work program. Highlight any deviation in time schedule in the weekly reports
 14. Will do the vetting of tender document and bills of quantities prepared by PMC and report any shortcomings to NIPER Hyd.

15. The list of works to be undertaken is as under:

S no.	Name of Work	Approx. Buildup Area (Sq m)
1.	Research and development building	9400 Sq m
2.	Animal House building	2000 Sq m
3.	Boy's Hostel	4200 Sq m
4.	Girl's Hostel	6300 Sq m
5.	Electrical sub station	300 Sq m
Total		22,200 Sq.m
Roads & culverts, boundary wall, fencing and allied services / infrastructure / Landscaping work		Will be developed by PMC as per contract

Note:

- (i) The above broad scope of the work is mentioned to give the applicants only an idea of the type of work NIPER-hyd may undertake.
- (ii) The built up area indicated above may change significantly higher or lower depending upon the designs approved by the Institute.

(iii) NIPER-hyd will have the option to award any one or more works to more than one agency.

16. During the course of construction, undertake unannounced visits to the site to check the quality of Construction at various stages of the work such as:

Layout of the Buildings and services

- Orientation as per the given plan
- Alignment of the wall as per the directional coordinates given in the drawings

Earthwork

- Surface dressing and site clearance to be done for proper layout
- Disposal of the excavated earth as specified and spread
- Stacking of good earth for refill
- Back fill to be in layers, watered and rammed before subsequent layers.

Foundation stage

- Undergrowth and roots encountered to be removed.
- Dimensional verification of footings
- Checking the layout marking and center lines, at random
- Checking the reinforcement before concreting
- Checking the concreting arrangements and witnessing concreting of adequate footings, at random

Plinth stage

- Checking the production (mix etc.), w/c ratio of the concrete, slump etc.
- Checking the quality of masonry
- Checking the formwork, verticality of sides, its alignment etc.
- Checking the reinforcement fabrication and placement of reinforcement in plinth beams
- Checking the placement compaction of concrete in plinth beams
- Checking adequacy and compaction of floor filling

Lintel stage

- Checking the quality of bricks and masonry with emphasis to joints, joint mortar, **curing**, etc.
- Checking the quality of column concrete
- Checking the formwork, verticality of sides, its alignment etc.
- Checking the reinforcement fabrication of lintels, at random
- Checking the placement and compaction of concrete in lintels

Roof stage/ slab stage

- Checking the quality of shuttering and formwork, with emphasis on lines and levels
- Checking the reinforcement fabrication / placement w.r.t structural drawings
- Checking the concrete while concreting, with respect to mix, proportion, W/C ratio and compaction
- Checking steel sheet fabrication for roof, roofing sheets and its fixing, etc.

Finishing stage

- Checking the quality of flooring with respect to levels and smoothness at random
- Checking the quality of flooring material (tiles / stones) before laying
- Checking the final floor finish, in respect of jointing, level and overall finish
- Checking the door and window joinery, door frames etc. with respect to Architectural drawings workmanship and fixtures, at random
- Checking the plaster on walls and ceiling with regard to proportions, line and level and curing
- Checking the finishing works at random such as painting, polishing etc.
- Checking the plumbing, sanitary and drainage fixtures including their placement etc.
- Checking for leakages, dampness etc.

Quality monitoring during construction of services & other infrastructure at construction stage

- Checking pipe work excavation levels, randomly
- Checking effectiveness of pipe joints
- Inspection of manholes, chambers and other structures

Exposed brick work (if executed)

- Check sizes, shape, texture, color in general and compressive strength, water absorption, efflorescence of the bricks at random.
- Checks on joint thickness, verticality of masonry wall, filling of horizontal and vertical joints in courses, frog filling.
- Report on sample workmanship.
- Check on curing.
- Check on raking of joints and pointing

Exposed concrete work (if executed)

- Check the centering and shuttering pattern as given in the GFC
- Check if the cement used is from the same batch and of single manufacturer to maintain the uniform color.
- No gaps between the shuttering panels

Fabrication of grills and gates & other structural steel works

- Check on steel elements fabricated to the dimensions and in accordance with GFC drawings.
- Check on quality of welding and its visual appearance.
- Check on grinding of welding and preparation of surfaces before the application of primer and paint.

Check List for Electrical Systems

During Construction:

Internal EI:

1. Conduit laying – Check quality of material, diameter of conduits, jointing of conduit, fish wires to be drawn in the conduits, to clear any obstructions.
2. Wiring – Check quality and size of wires. Check termination (lugging) of wires. Ensure that there are no joints in the wiring.
3. Check for insulation at random.
4. Check earth electrode laying, as per specifications. Check earth resistance etc.
5. Check switch boards fixing/ alignment. Marking of circuit on Switch boards.

DBs:

1. Check alignment
2. Check termination of Incoming and Outgoing wires/ cables.
3. Specifications of DBs and components.
4. Check earthing.
5. Marking of all circuits and DBs.

Panels:

1. Check components and their makes.
2. Check layout and alignment.

3. Check termination of cables.
4. Marking of feeders.
5. Check test certificates of manufacturers. Test certificates of CPRI.
6. Earthing.
7. Measure Insulation and earth resistance values.

Rising Mains:

1. Check layout/ dimensions/ alignments.
2. Check test certificates.
3. Check Bus bar sections. Insulator fixing. Tightness of joints. Connections.
4. Check earth conductor size and connections.
5. Check insulation and earth resistance measurements.

Sub Station:

General:

1. Layout of the substation.
2. Check for mandatory firefighting, shock treatment charts, Danger notice plates, rubber mats.
3. Cable trench covers.
4. Cable/ Bus trunking layout/ alignment.
5. Ventilation.
6. Fire Protection

Transformers:

1. Check Test certificates.
2. Tap changing devices.
3. Buchholz Relays, if any.
4. Ensure oil quantity, filtration/ dielectric test before charging.
5. Neutral and body earthing. Test earth resistance.
6. Cross section of earth conductor.
7. Insulation test of the system.

Panels:

1. HT/ LT Panel layout/ alignment.
2. Test Certificates of all the Circuit Breakers.
3. Calibration of all the protective relays.
4. Certificates of all the relays.
5. Insulation/ Earth resistance.
6. CT/ PT unit test certificates.
7. Testing of Electrical/ Mechanical interlocking arrangement.
8. Danger Notice Plates.
9. Checking of Meters. Test certificates.

DG Sets:

1. Layout and erection of the set.
2. Test Certificates
3. Commissioning of the sets.
4. Neutral/ Body earthing.
5. Measurement of Insulation and earth tests.
6. Load Test.
7. Checking of Protection relays. Calibration of all the relays/ Meters.
8. Fuel Storage arrangement. Fuelling arrangement.
9. Check Panel meters/ calibration.
10. Check interlock with Transformers.

Pumping Stations

1. Check layouts.
2. Check test certificates.
3. Check all the instruments like Pressure Gauges, Voltmeters, Ampere meters.
4. Check control circuits. Starter circuits. Ferrules should tally with control circuits.
5. Check performance like discharge, head, energy consumption with respect to the charts.
6. Check earthing connections.
7. Check Cable sizes.

HVAC:

1. Check layout of all the sub-assemblies like Indoor and outdoor units, pipe lines, Control Panels, cables control & power).
2. Check test certificates of the components.
3. Check commissioning tests of all the sub-assemblies:
 - Pressure tests of all the pipe lines / systems.
 - Performance tests of Chillers, Pumps. (if installed)
 - Insulation tests of electric control panels.

Ventilation System:

1. Check layout/ installation as per drawings.
2. All pre-commissioning tests to be carried out before starting.
3. Duct gauge to be checked, duct supports, isolation of vibration from structural members is to be ensured.
4. Capacity and pressure head of fans is to be measured.
5. Ensure no mechanical noise is emanating from bearings.
6. Ensure that the vibrations of the fan are within acceptable limits.
7. All test certificates to be checked.

Water Coolers:

1. Performance of water cooler to be checked.
2. Warrantee cards be checked.

Fire Alarm:

1. Check layout of control panels. Ensure proper Mimic diagram/ Display diagrams are provided.
2. All functional tests to be carried out.
3. Battery backup/ UPS be checked.
4. Zoning should be convenient for locating source of alarm.

Firefighting:

1. Check quality of pipes and fittings
2. Ensure that the firefighting arrangement is strictly as per drawings.
3. All performance tests are to be carried out.
4. Inspection from Fire Brigade authorities is to be got done and certificates obtained.
5. Capacities of various components are to be checked with reference to the contract and local bye-laws.
6. The mandatory signage of the equipment is to be checked.

POST CONSTRUCTION TESTS**SUB STATION**

1. Single Line Diagram (Containing details of voltage, Ampere, sizes, cable capacities and rating of equipment) of HT – the drawing will be framed and displayed in HT room.
2. Single Line Diagram (Containing details of voltage, Ampere, sizes, cable capacities and rating of equipment) for Substation including LT Panels will be framed and displayed in the LT room.
3. Single Line Diagram (Containing details of voltage, Ampere, sizes, cable capacities and rating of equipment) of DG Set–the drawing will be framed and displayed in DG room.
4. Single Line Diagram (Containing details of voltage, Ampere, sizes, cable capacities and rating of equipment) of Ring Main Units – the drawing will be framed and displayed in HT room.
5. Operation manuals/Instructions of DG set and ring main units and CT PT Units if any.
6. Protection System - Details of trip system and power source of tripping arrangement to be provided.
 - 6.1 Inter locking arrangement between transformers and DG sets may be exhibited.
 - 6.2 Trip settings to be checked. These settings should be properly graded with upstream/ downstream.
 - 6.3 Alarm/Trip settings to be checked.
 - 6.4 Fire protection- details of fire extinguisher, fire buckets, hand gloves, safety shoes, helmet, and safety goggles.
 - 6.5 All the trenches should be covered with checker plates with suitable handles.
7. Capacitor Bank- APFC relay- Confirm they have been tested/checked for exact set points.

8. Parallel operation of transformers - It is hoped the transformers are suitable for parallel operations. Confirm they have been sequenced rightly for parallel operation. Whether they have been check for parallel operation.
9. Layout drawings of all the sub stations will be framed and displayed in the Sub Station Rooms.
10. Operation Manuals, Test Results for all parameters, as laid down in the contracts will be furnished.
11. Efficiency charts/ curves on full load/ partial loads will be furnished.

Switch room

1. **Panels**- SLD, GA diagrams (Containing details of voltage, Ampere, sizes, cable capacities and rating of equipment) – the drawing will be framed and displayed in switch room.
2. Control circuit of instruments – the drawing will be framed and displayed in switch room.
3. UPS System - SLD, GA diagrams (Containing details of voltage, Ampere, sizes, cable capacities and rating of equipment) – the drawing will be framed and displayed in switch room.

Distribution Boards

1. Circuit locations to be duly marked on the inside of the cover of DB.
2. Switch boxes/Plates – Circuit details of respective DB to be marked.

Earthing

1. Schematic diagram indicating earth conductor sizes and location/ type of earth electrode will be displayed.
2. Earth resistance tests of all the earthing stations to be furnished.

DG Set

1. Storage arrangement of fuel for DG set to be communicated. Whether fuel transfer pumps available?
2. Operation Manuals, Warrantee Cards, Test Results for all the parameters, as laid down in the contracts will be furnished.
3. Layout drawings, Electrical panel GA/ SLD/ Control Circuit drawings will be framed and displayed in the DG Room.

Insulation Tests

1. Insulation test results of all the circuits to be furnished.

Pumping Stations

1. Layout Drawings, Schematic drawings, Electric Panel GA drawings, SLD drawings, Control Circuit drawings will be framed and displayed in the Pump House.
2. Operation Manuals, Performance Curves, Test Certificates will be furnished.
3. Test Results for operations, as laid down in the respective contracts will be carried out and results furnished. The test results will clearly indicate Discharge/ Head parameters and results
4. Efficiency charts/ curves on full load/ partial loads will be furnished.

Lifts

1. Lift License will be framed and prominently displayed in the Lift Cars.
2. Operation Manuals, Results of all the tests, as provided in the contract will be furnished.
3. Control Circuit Drawing will be framed and displayed in the machine room. Electrical Schematic Drawing also will be framed and displayed in the Machine Room.

HVAC

1. All Operation Manuals, Parts Catalogues, Test Certificates, Performance charts, Warrantee Cards to be furnished.
2. Test Results for operations, as laid down in the respective contracts will be carried out and results furnished. The test results will clearly indicate Discharge/ Head parameters and results
Efficiency charts/ curves on full load/ partial loads will be furnished.

3. Season Test, Capacity tests on various components viz. Compressors, Cooling Towers, AHUs etc., as per contract be conducted and results recorded and furnished to NIPER-Hyd.
4. Layout Drawings, Schematic drawings, Electric Panel GA drawings, SLD drawings, Control Circuit drawings will be framed and displayed in the Plant Room and AHU rooms.
5. Since operation and maintenance is covered under contract. Names along with qualifications and contact Nos. be furnished. Names and contact Nos. be displayed prominently so that in case of necessity, they can be easily contacted.

Ventilation System

1. All Operation Manuals, Parts Catalogues, Test Certificates, Performance charts, Warrantee Cards to be furnished.
2. Test Results for operations, as laid down in the respective contracts will be carried out and results furnished. The test results will clearly indicate Discharge/ Head parameters and results
3. Efficiency charts/ curves on full load/ partial loads will be furnished.
4. Layout Drawings, Schematic drawings, Electric Panel GA drawings, SLD drawings, Control Circuit drawings will be framed and displayed in the Plant Room and AHU rooms.
5. Since operation and maintenance is covered under contract. Names along with qualifications and contact Nos. be furnished. Names and contact Nos. be displayed prominently so that in case of necessity, they can be easily contacted.

Water Coolers

1. Inventory along with location be furnished. Warrantee cards be furnished.

Fire Fighting System

1. All Operation Manuals Test Certificates, Performance charts, Warrantee Cards to be furnished.
2. Test Results for operations, as laid down in the respective contracts will be carried out and results furnished. The test results will clearly indicate Discharge/ Head parameters and results
3. Layout Drawings, Schematic drawings, Electric Panel GA drawings, SLD drawings, Control Circuit drawings will be framed and displayed in the respective locations.
4. Since operation and maintenance is covered under contract. Names along with qualifications and contact Nos. be furnished. Names and contact Nos. be displayed prominently so that in case of necessity, they can be easily contacted.
5. A training program will be organized by the contractor to impart training to the concerned personnel, responsible for firefighting.
6. Copy of approval from competent local body authority, as per local regulations, be framed and displayed.

Fire Alarm System

1. All Operation Manuals, test Certificates, Performance charts, Warrantee Cards to be furnished.
2. Test Results for operations, as laid down in the respective contracts will be carried out and results furnished. The test results will clearly indicate Discharge/ Head parameters and results
3. Layout Drawings, Schematic drawings, Electric Panel GA drawings, SLD drawings, Control Circuit drawings will be framed and displayed in the respective locations.
4. Layout drawings indicating location of all smoke detectors, control panels will be framed and located prominently so that in event of unfortunate incident an appropriate action can be taken.
5. Since operation and maintenance is covered under contract. Names along with qualifications and contact Nos. be furnished. Names and contact Nos. be displayed prominently so that in case of necessity, they can be easily contacted. A training program me will be organized by the contractor to impart training to the concerned personnel, responsible for firefighting.
6. A training program will be organized by the contractor to impart training to the concerned personnel, responsible for firefighting.
7. Copy of approval from competent local body authority, as per local regulations, be framed and displayed.

Note: The above stages of the works, activities, check lists etc. are indicative only and the consultants may suggest and adopt any additional stage or checks including innovative approach for achieving optimum quality with **zero tolerance to defect**.

6.0 Deliverables & Schedule

1. The team leader of the consultant shall inspect the site every week (**at least 5-6 visits per month or day to day basis as per required by NIPER-Hyd**) and submit his report. If required, he may need to visit more frequently in certain cases.
2. Develop and prepare all inspection, documenting & reporting formats including transmittal methodology and follow the same for the entire period of contract.
3. The inspection reports in case of non-compliances of serious nature having consequential effects on quality of work should be submitted to NIPER-hyd within 3 days of the visit without waiting for weekly reporting.
4. Attend periodic meetings with NIPER-hyd, PMC, Contractors and Consultants highlight concerns raised in the inspection reports.
5. Post construction completion: Undertake final inspection and declare the construction of the building / services fit for use with the intended level of workmanship and finishing.

NOTE: all reports, tests and checklist will be as per quality assurance manual of CPWD 2022. Refer the annexures of the said manual for formats of report and other details.

7.0 Schedule of Completion of Tasks:

Consultant will prepare and submit an inspection report within 15 days of mobilization, submit periodic reports (mentioning the stages at which these will be shared) and post project completion report. The consultant shall also make final inspection and declare the construction of the building / services fit for occupation, ensuring that the intended level of workmanship and finishing has been achieved. Also, shall ensure to obtain occupancy certificates/other mandatory certificates from authorities.

8.0 Data and services to be provided by the client:

NIPER-hyd will provide all information related to the work such as contract documents between PMC and contractors, GFC drawings issued by the consultant and project documents agreed between PMC and NIPER-hyd. PMC will provide access to all work sites and beneficiaries under the project.

9.0 Review and monitoring of consultant's work:

Consultants will be monitored at various stages by NIPER-hyd through periodic reviews. The project implementation period is envisaged to be the same as the contract period/ extended contract period of the contractor for execution. In case of extension of contract period, no extra costs shall be paid to the consultant. The consultant through the periodic performance reports, would point out delays observed, if any and suggest measures to adhere to the time schedule. In case, performance of the consultant is assessed as unsatisfactory, the contract would be deemed closed. In such case the consultant would get a chance to explain and defend himself in front of a review committee and the decision taken by the review committee shall be final and binding on both the parties. The review committee would consist of NIPER-hyd representatives and / or external members as appointed by the Director, NIPER-hyd.

10.0 List of Key Professional Positions whose CV and experience would be evaluated.

CV of the Project in Charge as well as all the experts / personnel proposed to be associated / employed by the consultant for the project will be evaluated by NIPER-hyd for approval before getting engaged for the project. The team of personnel should comprise of Architects and Engineers of the respective disciplines.

11.0 Preparation of Proposal, Submission, Receipt of Proposal, its evaluation and award of contract.

11.1 Preparation of Proposal

Intending consultant shall submit Approach Paper for the proposed TPQA in demonstration of their understanding of the work involved, expertise in the field and also efficiently and effectively discharging their contractual obligations and responsibilities in achieving the intended purpose of engaging TPQA consultant. The approach paper may include the checklists for Third Party Inspections, Important stages of checks / verification, monitoring of compliances of suggested corrective measures, reports and formats etc.

The consultants are expected to prepare Proposal covering the following aspects:

- (i) The consultant shall give power point presentation of approx. 20 minutes covering their approach taking a typical building project executed by them of approx. 50 Crore.
- (ii) Manpower such as architects / engineers required to provide effective third party inspection and their period of engagement in different scenario and stages of works from start to handing over of the project to NIPER-hyd.
- (iii) Proposed activities to be undertaken by the architects/engineers engaged by the agency.
- (iv) Important stages of construction to be inspected and reporting thereof.
- (v) Proposed check list to ensure quality workmanship at each stage of construction.
- (vi) Proposed key materials' testing and its extent (As part or percentage of that specified in the relevant IS codes) by a third party quality assurance agency.
- (vii) Total quality assurance plan including innovative approach for achieving optimum quantity with zero tolerance to defects.

11.2 Submission

11.2.1 The Proposal should be submitted along with other documents On CPP portal while uploading the bid. The authorized representative of the Consultant should present the same when called for technical presentation. (sign all the pages of Proposals). **as this is one the parameters for technical qualification.**

11.2.2 Submission Date

submit online response through Central Public Procurement Portal (CPPP) only by 03/10/22 1500 hrs.

11.2.3 Submission of Queries

The consultants may raise any queries through email (**sp.niperhyd@gov.in**) only; no telephonic queries will be admissible.

11.3 Evaluation & Award of Contract

11.3.1 Evaluation Methodology:

The Evaluation Committee will evaluate the proposals on the basis of assessment of consultant's approach towards the TPQA, experience, expertise and interaction with the Committee formed for the purpose of assessing overall capability of his team proposed to be engaged on quality assurance job. The following criteria will be adopted for evaluation:

I	<p>Presentation will be comprised of the details as per 11.1 also it should have the details mentioned below:</p> <p>a) Brief of the project executed with highest value (approx. 50 Cr) executed within last three years.</p> <ul style="list-style-type: none">-Title of the project.-contracted cost of the project and actual cost of the project.-PMC involved and client details. <p>b) Challenges faced in the execution:</p> <ul style="list-style-type: none">-whether completed as per timelines.-if extended, reasons for the same
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	-how was the financial variation dealt. c) whether any cost escalation happen, if yes methodology adapted to mitigate the same.
II	Interaction of Project in Charge with Selection committee

NIPER-hyd may decide to visit and inspect works on which bidder was engaged as TPQA agency before/after the presentation/interaction with the agency. **Note: This presentation forms an integral part of technical evaluation and NIPER Hyderabad has every right to disqualify the bidder who fails to present the proposal or if not satisfied with the presentation.**

Bidder will be rejected on technical grounds if the proposal presented by him is not found effective or up to the mark by evaluating committee. No further request for SECOND CHANCE WILL BE ENTERTAINED ALSO IF REJECTED ON TECHNICAL GROUNDS, BIDDER WILL NOT BE CONSIDERED FOR FURTHER ROUNDS.

11.3.2 Fee for Providing TPQA Services:

- (i) ***The cost of work for calculation of consultancy fee payable to TPQA agency will be the gross value of the work done by the contractor plus GST as applicable.***
- (ii) The valid payments will be made roughly on quarterly basis and fee will be calculated based on the gross value of work done and paid to the contractor after due inspection and report by TPQA agency since the previous bill.
- (iii) NIPER-hyd shall pay the GST with each payment at the prevailing Government rates. However, income tax shall be deducted at source on the amount paid at the prevailing rates. NIPER-hyd shall issue a certificate of tax deducted at source (TDS) in due course of time.

11.3.3 Award of Contract

The consultants found suitable by the Evaluation Committee **after the presentation of proposal** will be declared technically qualified and will be informed through CPP portal. **The financial bid of only technically** qualified bidders will be opened and the bidder declared as L-1(**quoting the minimum percentage on contracted value of project**) will be awarded work. The performance of the TPQA agency awarded the project will be continuously and constantly monitored by NIPER-hyd. Based on such evaluation, the TPQA agency may be awarded more projects. The projects on offer may not be restricted to Phase-1 works only but future works as well. NIPER-hyd at its sole discretion may award any one or more works to the agency at the fee already indicated in para above. Director, **NIPER-hyd shall be the competent authority in this regard whose decision shall be final and binding.**

NIPER-hyd reserves the right to accept or reject any or all the proposals without assigning any reason. NIPER-hyd also reserves the right to call for additional information from consultants.

11.3.4 Agreement

The successful bidder shall enter into an agreement with NIPER-hyd consisting of this RFP and letter of award on a Non-judicial stamp paper of Rs 1000/-.

11.3.5 Integrity Pact

NIPER-hyd being an autonomous institute created by an Act of the Indian Parliament, and must ensure preservation of rights enshrined under the constitution. NIPER-hyd deals with the agencies/ consultants with a very high degree of integrity, commitments and sincerity towards the works undertaken. In order to ensure compliance with the constitutional mandate NIPER-hyd and the consultant have to sign Integrity Pact/ Agreement which is part of the main agreement.

11.3.6 OTHER REQUIREMENTS:

1. Consultants shall have all the minor testing equipment such as but not limited to: sieves and weight, moisture meter, soil density meter, temperature recorder, surface finish recording instruments such as straight edges, measuring tapes, calipers, etc. at site locations for 'on spot field testing' of material and workmanship.
2. In addition to the above specific quality testing required by NIPER-hyd for any of the work or material shall be carried out the next working day of requisition and report shall be furnished as soon as possible preferably the next working day of completion of the requisitioned test.
3. The Contract Documents are the basis of all works to be undertaken. All documents refer to the standard CPWD specifications/works manual. In cases, where specific specifications are not available or provided in the contract documents, general good engineering practices shall be followed in consultation with NIPER-hyd and PMC.
4. The Consultant shall make unscheduled visits to ensure random/surprise checks from time to time of the works under construction and submit report on the same day and in no case later than the following day to NIPER-hyd. These points shall be checked for compliance in subsequent visits and reported.
5. It should be remembered that time is of the essence and that considerable judgment is required to see that the progress is achieved in the work as per milestone mentioned in the contract document between PMC and contractor.
6. Apart from the specific activities as described above the Consultants shall also advise the Director, NIPER-hyd on the implementation and compliance of the of accepted environment friendly sound practices on control of dust, noise, water, air and soil pollution due to construction activities, and general safety and security on the construction sites etc.
7. The consultant shall also inspect, review and report the adequacy and competence of PMC contractor's site engineers, supervisors, skilled labour and available constructions tools and machinery and adoption of adequate safety measures.
8. Review contractor's work program and advised on corrective measures. Develop and prepare all the reporting formats including transmittal methodology and follow the same for the entire period of contract.
9. Random/ independent tests of materials brought at site shall be carried out for samples at 2% of the sampling specified in the BIS/ PMC contract from NABL accredited labs. Payment for the same will be reimbursed on submission of the vouchers/receipts.
10. The consultant shall attend Lab and Building Works Committee meetings and give a brief presentation on each quality standards maintained at site and bring out specific points of improvements.

12.0 RECONCILIATION MECHANISM

In case of differences of opinion among Architectural consultants, PMC & TPQA Agency the same shall be resolved by **Lab and Building Works Committee** and decision of which shall be final and binding on all parties.

13.0 TERMINATION

The consultancy services can be terminated by either party by giving 30 days' prior notice and listing out the reasons for doing so.

14.0 ARBITRATION

In the event of any dispute or differences be amicably resolve by parties, if not may be dealt as per arbitration and conciliation act 1996 (amended in 2021). The parties to the dispute will share equally the cost of arbitration as intimated by the arbitrator.

15.0 JURISDICTION

Jurisdiction shall be the courts of Hyderabad.

16.0 FINANCIAL BID FORMAT

FINANCIAL BID FORMAT

(to be submitted on Bidder's letter head)

To,

The Registrar
NIPER, Hyderabad
Balanagar, Hyderabad

Dear Sir,

I / We on the behalf of (Company name) quotes the TPQA consultancy fee as under,

S No.	Description of Services	Cost of the Project (in INR)	Fee % Cost of the Project(maximum capped to 1%)	Amount in Figures	Amount in words
1.	Providing TPQA services for the construction of NIPER, Hyderabad campus as the Terms of Engagement	Rs.80 Cr (Estimated)			
2.	Total				

Applicable GST will be extra

1. The quoted fee shall be payable on gross value of actual done and paid to the contractor.
2. Quoted fees is inclusive of all taxes and charges except GST.
3. No extra amount shall be payable for the services rented by the TPQA consultancy, under any circumstance.
4. Extra service, if availed will be paid extra, on mutually agreed terms and amount.

Annexure-I

1. Road materials

The relevant tests are included in the standard CPWD / DSR specifications; these shall include but not be limited to the following:

Test for bitumen and aggregates

Bitumen	Penetration test Softening point test Ductility test Water content test
Soils	Dry density/ protector compaction CBR value
WBM	Camber Thickness of layer and grading Width of metal layer
BT surface	Camber Thickness Width of BT layer BT content (Bitumen extraction test) Stripping value

2. Building works

Structural steel	Tensile test Bend test
Bricks	Compressive strength test Water absorption test Efflorescence test Dimensional tolerance
Blocks	Compressive strength test Water absorption test Density test
Tiles	Water absorption test Wet transverse strength test Abrasion/ wear resistance test
Ceramic tiles	Water absorption test Wet transverse strength test Abrasion / wear resistance test Crazing test
Galvanized sheeting	Thickness of sheets Thickness of galvanizing
Water proofing compounds	Tests for permeability and compatibility
Paints	Performance tests Thickness Dimensional verification, physical examination fixtures and relevant tests.
Plumbing and sanitary	

B. Mechanical and electrical works:

List of mechanical and electrical items required to be inspected by the consultant

1. Mechanical

Pumps by type

2. Electrical

Motors by type

Electrical starters
Electrical Panels
Switchboards
Motor control panels
DC distribution panels
Induction-cum-enunciation panels
Bus ducts
Battery chargers

Transformers HV/ MV/ LV
 Power voltage Current
 Capacitors
 Level switches Electrical cables

3. Miscellaneous

Earthing equipment
 Lightening arrestors and essential fittings
 Cable trays
 Any other items as specified in the contract documents

4. Inspections

The main headings for these works are as follows:

Pumps
 Motors
 Electrical panels Transformers
 Capacitors Cables

5. Pumps

Items for third party inspection at site:

Pumps	1.	Review of material test certificate for pump casing, bowls, shaft, impeller bearings, column pip etc.
	2.	Review of factory test results.
	3.	Performance test at site for Head, Discharge, Power Input
	4.	Witnessing performance test at 49 Hz and 50 Hz frequency including vibration measurement covering following tests.
Motors	1.	Visual examination of motor assembly
	2.	Review of test certificate for conductor, starter coil, shaft bearing etc.
	3.	Witnessing routine test at site no load and load test vibration measurement as per IS
	4.	Verification of type test report
	5.	Visual and dimensional check
Transformer	1.	Visual inspection, dimensional check and verification of bill of materials.
	2.	Review of factory test reports
	3.	Witnessing insulation resistance voltage test at HV side and LV side
	4.	Routine tests as per IS:2026
	5.	Verification of type results, temperature rise test, impulse test, insulating oil test etc.
	6.	Witnessing all routine and type test as per IS:2834 such as sealing test, test for output/ capacitance, insulation resistance test between terminals. Containers and loss angle measurement, test for efficiency of discharge device, test for dielectric loss angle, thermal stability test, self-- healing test, voltage test between terminals
	7.	Visual and dimensional check
	8.	Witnessing routine test as per IS:1554
	9.	Witnessing insulating test, resistance test, current rating test, star reactance test, star capacitance test, short circuit current test, voltage drop test
	10.	Earth resistance test for Body and Neutral
Pipe and specials	1.	Visual and dimensional check
	2.	Review of chemical and physical test certificates as per the relevant Indian Standard specifications.
	3.	Witnessing hydrostatic pressure test as per the relevant Indian Standard specifications
	4.	Checking the integrity of epoxy lining for MS pipes at joints after laying and jointing pipes

Valves	1.	Visual and dimensional check
	2.	Review of material test certificates for valve body and internals
	3.	Operational smoothness
	4.	Witnessing hydrostatic test/ leakage test as per applicable code
Diesel generating sets	1.	Review of tests as specified in relevant IS or Special Specifications
	2.	Full load test for 6 hours
	3.	Over load test for half an hour
	4.	Insulation test
	5.	Earth Resistance test

D. Quality monitoring during construction of pipelines

- Checking pipe work excavation levels, randomly Checking effectiveness of pipe joints
- Inspection of manholes, chambers and other structures
- Base levels and concrete thickness
- Walls
- Roof slabs and covers
- Checking sewers for water tightness

E. Quality monitoring of buildings works

The total quality monitoring of various works will be included but not be limited to the following

- Quality of materials
- Quality of construction of various works w.r.t. strength, performance, functionality etc. during different stages of construction
- Workmanship & Finishes
- Performance of mechanical and electrical equipment and systems

1. Quality of materials

- The checking of quality of materials includes
 - Physical examination
 - Review of tests reports
- Collecting representative's samples wherever possible and conducting necessary tests for confirmation
- Informing the concerned agencies regarding the acceptance of material or otherwise
- Witnessing the performance tests on machinery carried out by the manufacturer at his factory, before dispatching to site.

2. Quality monitoring during construction

During the course of construction, undertake unannounced visits to check the quality of construction at various stages of the work such as:

Foundation stage

- Dimensional verification of selected footings
- Checking the layout marking and center lines, at random
- Checking the reinforcement fabrication, at random
- Checking the concreting arrangements and witnessing concreting of a few footings at random.

Plinth stage

- Checking the quality of masonry
- Checking the reinforcement fabrication of plinth beams at random
- Checking the quality of concrete in plinth beams, at random
- Checking adequacy and compaction of floor filling, at random

Lintel stage

- Checking the quality of masonry with emphasis to joints, joint mortar, curing, etc.
- Checking the quality of column concrete
- Checking the reinforcement fabrication of lintels, at random
- Checking the quality of concrete in lintels

Roof stage/ slab stage

- Checking the quality of shuttering and formwork, with emphasis on lines and levels

- Checking the reinforcement fabrication of selected panels
- Checking the arrangements for concreting, vibration and curing
- Checking the concrete while concreting, with respect to mix proportion, W/C ratio and compaction
- Checking steel sheet fabrication for roof, roofing sheets and fencing and fixings

Finishing stage

- Checking the quality of flooring with respect to levels and smoothness at random
- Checking the door and window joinery with respect to workmanship and fixtures, at random
- Checking the plaster in walls and ceiling with regard to proportions, line and level and curing at random
- Checking the finishing works at random such as painting, fixing of tiles, sanitary fixtures, and steel grill works, etc.
- Observation for dampness

Quality monitoring during services & Infrastructure construction stage

- Checking pipe work excavation levels, randomly
- Checking effectiveness of pipe joints
- Inspection of manholes, chambers and other structures
- Checking of other work in filling for consolidation / OMC.

3. Mechanical and electrical work

- The standard and special specifications shall be referred, to determine the scope of the work to be undertaken. Test of earthing and lightening protection systems shall be included.

F. Quality monitoring during construction of landfills

- Checking the level of excavation, plan dimensions and side slopes
- Checking the type of soil available and its uniformity in the site
- Verifying the soil with respect to its suitability for mixing with bentonite / binding material in achieving required permeability
- Mixing of bentonite / binding material and compaction of layers through testing on compacted layers
- Checking the thickness of mixed liner through physical measurement at representative locations
- Checking the thickness of HDPE / Geo-synthetic liner
- Checking the efficiency of jointing through appropriate tests
- Checking the laying of HDPE / Geosynthetic liner

Above all, the Consultant must ensure that energy efficiency and environment-friendliness of all constructions and interventions are maintained and also ensure the same about the performance of the equipment procured.

4.Verification of running (RA) bills / final bill received from the PMC and authorization for making payments thereof.

Sr. No.	Bill No. & Dated	Amount Claimed by the Contractor	Amount Certified by the PMC (M/s NPCC)	Amount cleared for payment post checking & Verification

1. Checking 100% of the measurements vis-a-vis GFC drawings, including amendments thereof
2. Checking 100% reinforcement steel before casting.
3. Checking 100% of the measurements of all the items embedded underground, concert, masonry etc.

Annexure-II

REPORTING REQUIREMENTS AND FIELD STUDIES/ TESTS

Name of Report	Contents	Frequency
Field Quality Audit Report	Field / laboratory test report, observations, analysis and recommendations for further action etc.	Immediately upon completion of field visit/ lab test
Periodic / Fortnightly Reports (as outlined in stages)	Abstract of Field Test Reports, General Contract Summary, Issues for follow up and compliance, special recommendations on any modification required.	Within one week of the completion of the stage
End of Project Report	Contract summary, brief description of services, special events.	One month before contract completion
Day to Day inspection report	Field tests /observations analysis of processes and recommendations	Immediately upon observation of non-standard engineering process