

# **National University of Technology**



## **REQUEST FOR PROPOSAL**

### **Design & Engineering Consultancy Services**

**FOR**

**EXTENSION OF ACADEMIC BLOCK (TEACHING  
LABS, FACULTY SITTING SPACES ETC), AND  
STUDENT / VISITING FACULTY HOSTELS AT  
NATIONAL UNIVERSITY OF TECHNOLOGY  
(NUTECH) ISLAMABAD**

**September, 2019**

# **REQUEST FOR PROPOSALS (RFP)**

## **DESIGN & ENGINEERING CONSULTANCY SERVICES**

### **FOR**

#### **EXTENSION OF ACADEMIC BLOCK (TEACHING LABS, FACULTY SITTING SPACES ETC), AND STUDENT / VISITING FACULTY HOSTELS AT NATIONAL UNIVERSITY OF TECHNOLOGY (NUTECH) ISLAMABAD**

1. **Premise.** NUTECH plans to construct Teaching Labs, Faculty Sitting Spaces etc. and Student & Visiting Faculty Hostels (Male & Female) to be located at National University of Technology (NUTECH), Islamabad encompassing total covered area equal to 159,463 Sft (One lac fifty nine thousand four hundred and sixty three square feet approximately). Funded by PSDP, GoP. The project is envisaged to be completed in '18' months' time from the date of mobilization (excluding design, tendering and contracting period of nearly 4 months).
2. **Aim.** To seek proposals from HEC prequalified consultants to submit technical and financial proposals (separately) for a '**purpose built**' conceptual plan for construction of Teaching Labs, Faculty Sitting Spaces etc. and Student & Visiting Faculty Hostels (Male & Female) at National University of Technology (NUTECH), Islamabad. The conceptual plan should be self-contained in services, utilities, economy, timely completion and incorporation of all user requirements with matching optics, land usage and aesthetics.
3. **Profile.** Since HEC has already prequalified panel of consultants for Category-I (Region II for Punjab & ICT Islamabad) after meeting all codal formalities therefore the RFP shall only be issued to HEC prequalified panel. However, participants shall provide the following latest profile data (for the purpose of obtaining update information only) along-with the technical proposal as follows: -
  - a. Company's latest profile.
  - b. Details of similar projects designed and supervised on **Fast Track** mode during last 7 years with cost effect indicating names of projects and clients encompassing details of highest value single contract.
  - c. In case of joint venture, an MOU between Parties on Stamp Paper.
  - d. CVs of permanent technical personnel / staff held with the Firms.
  - e. List of technical software and other equipment available held by the firm.
  - f. Financial status of the firm and audited account statement(s) for the last 3 years.
  - g. National Tax Number along with copy of income tax returns for last 3 years.
  - h. Valid Registration with PEC / PCATP.
  - i. Schedule of Design/Consultancy Services with all major mile stones.

- j. An Affidavit to the effect that the Firm has neither been involved in Litigation / Arbitration nor black listed.
- k. Name of the Firm, Memorandum and Articles of Association, Authority letter to sign and submit the bid, Organization chart, postal addresses of firm along with telephone, Fax, mobile numbers and E-mail etc.

4. **Scope of Services**

- a. To prepare conceptual design, detailed architectural and structural design, 3D renderings, layout plans as per user requirements, engineering laboratories design, energy efficient design (where applicable), internal and external services including HVAC, water storage tanks preferably rain harvesting system, building waste treatment, firefighting design, landscape, parking areas (where required), access and egress of buildings, walk ways, traffic circulation plan, work methodology and self-contained proposal for fast track and successful project completion mechanism.
- b. Continuous design support throughout construction period and submission of all approved drawings / designs etc.
- c. After formal approval by the competent authority, the successful bidder shall be tasked to prepare detailed construction design, Bill of Quantities (BoQs) including price escalation factor, tender documents, construction drawings, tender drawings for Civil and HVAC works, installation of lifts (at least 3 including 1xCargo lift) architectural plans and Top supervision proposals (on required basis).

5. **Design Objectives**

- a. Design should be simple and in straight lines for timely completion of project within stipulated time and allocated funds; without revisions or supplementary estimates. Additionally, the design should be economical, viable and strictly in accordance with relevant codes, building scales and bye-laws of Capital Development Authority Islamabad.
- b. Should be sustainable as per prevailing conditions and bye-laws of Capital Development Authority Islamabad.
- c. The building should be airy, ventilated and conform to local climatic conditions, Should also be energy efficient and based on the latest technology.
- d. Prevailing accommodation scales to be met.
- e. Execution to be smooth, eventful and without delays. Appropriate land usage plans to be evolved to guard against wastage. Overall thematic plan should conform to surrounding buildings at NUTECH.

- f. Research and academic oriented user requirements should be incorporated in all aspects.
- g. The building should have adequate heating, ventilation and cooling systems.
- h. Well planned parking areas, external and internal security plans including CCTV network, landscape and well-planned external services.
- i. All codal formalities should be elaborately met in design, tendering and execution phases strictly in accordance with PEC & PPRA Rules and within given lines.
- j. Timely completion.

6. **Technical Proposal** The consultants are required to prepare logical and economical design proposal as per requirements in accordance with relevant by-laws to achieve maximum economy in capital and subsequent maintenance cost(s). The Consultants shall also prepare and submit detailed specifications for execution of the project; clearly outlining the material specified in TOR in the context of satisfactory and documented quality assurance.

7. **Time Period**

As follows: -

S/No	Description	Duration
a.	Design:	2 months from the date of work order
b.	Tendering formalities & Acceptance:	2 months from the date of receiving approved Design / Tender documents and approval of design from CDA where required
c.	Defects Liability Period:	Consultant will be responsible for all design works till building life cycle after handover.

8. **Supported Documents**

- a. Master Planning of the Land/area with site orientation and Dimensions - Annex-A
- b. Technical Evaluation / Marking Criteria - Annex-B
- c. Summary of External Works - Annex-C
- d. User Requirements (Technical) - Annex-D
- e. Floor Plans - Annex-E
- f. Soil Investigation Report (After selection by Consultant) - Later

9. **Consultancy Requirements**

- a. **Architectural**. Preparation of conceptual plans, working drawings, floor plans, elevation, section details, architectural renderings and related details to be submitted in 3D perspective.

- b. **Structural.** Details of foundation plan, plinth beams, detail of columns, beams, slab framing plans (each floor), underground and overhead water tanks, stair cases, shear walls, basement and any other construction details etc.
- c. **Tender Drawings and Bill of Quantities.** Preparation of tender drawings, bill of quantities (BOQs), price escalation factor, special provisions, specifications, tender documents including, tender drawings and structural details to be submitted (after formal approval of conceptual design).
- d. **Electrical.** Electrical layout plan of each floor with internal and external electrification details up to node points. Provision of complete electrical power calculation and identification of required transformer including specification with HT/LT panels, detailed design along with BOQ and tender drawings. Standby power supply backing system encompassing labs load, HVAC and lighting load etc should also be planned.
- e. **IT Services.** Academic Block, its labs, offices and Hostel Block will be externally connected through fiber with the main network of NUTECH. Internally the local area network shall cater for connectivity of IT equipment, CCTV nodes, access control system, Wi-Fi points etc. The plan shall also cater for provision of primary power connectivity alongwith standby uninterrupted power solution for all the IT system mentioned above.
- f. **Telephonic Communication.** Cabling for voice communication from exchange to the offices, labs and Hostel area will also be planned.
- g. **Fire Fighting System.** Incorporation / inclusion of effective passive and active latest fire-fighting measures.
- h. **Vertical Movement.** 3x Lifts for the building (i.e. 2 x passenger lifts + 1 cargo). Fire escape stair cases should be incorporated.
- i. **HVAC.** Detailed design and layout plans for HVAC works should be prepared along with bill of quantities and tender drawings.
- j. **Plumbing.** Preparation of plumbing details for each floor, external sewerage layout plans and external drainage etc.
- k. **Land Utilization Plan.** Appropriate land utilization plan, parking places, Pedestrian movement traffic circulation plans, landscape, green spaces management, security requirement at gates and internal monitoring including CCTV System and Biometric verification system.
- l. **Taking off Sheets.** Consultant to provide fair copy of taking off sheets.
- m. **Consultants Certification.**
  - (1) The Consultant will give written undertaking that all design estimates, BOQs and drawings are within five percent (5%) accuracy variation.

- (2) Any additions in cost due to design faults and consequent losses to the Employer shall be liable to be borne by the consultant.
  - (3) Consultant shall be responsible for any errors or omissions.
  - (4) Consultant shall also be held responsible for losses or damages suffered by the employer on account of any misconduct and unsatisfactory performance in discharge of consulting services.
- n. **Top Supervision.** Top supervision to be done on required basis subject to written request of Project Controlling Officer.
- o. **Approvals.** All approvals related to government agencies shall be processed by the consultant on required basis.
10. **Site Visits.** All Bidding Consultant(s) shall be provided access to visit the site prior to preparation of conceptual design plans.
11. **Clarifications.** Clarifications regarding the RFP, if any, shall be sought from NUTECH Project Management Office at Tel No. 051-5476809 during office timings on all working days (except Saturdays, Sundays and closed holidays). The same can also be sought in writing for subsequent discussion in the Pre-Bid Meeting.
12. **Pre-Bid Meeting.** A pre-bid Coordination Meeting shall be held at the proposed site at NUTECH Islamabad on **19<sup>th</sup> Sep 2019** at 1100 hours to discuss clarifications (if any) regarding technical aspects of the project from NUTECH technical team prior to final submission of technical & financial proposals.
13. **Submissions**
- a. **Stage-I**
    - (1) Submission of conceptual plans, architectural renderings (3D) and technical proposals including profile as per user requirements.
    - (2) Financial Proposal for Design and Drawings / Tender Documents.
  - b. **Stage-II.** Substantially responsive consultant, whose design is approved by the NUTECH Project Board and financial proposal evaluated / recommended by the Bid Evaluation Committee shall be issued acceptance letter followed by formalization of contract with the Employer. After issuance of work order, the consultant shall be required to submit tender documents comprising of tender drawings, bill of quantities (BOQs), price escalation factor, special provisions, specifications, conditions of contract, architectural and structural details, it also includes review of design & necessary changes as per user requirement and Top Supervision. The submissions should be done on fast track basis.
14. **Conceptual Planning Criteria.** The conceptual design to include work such as energy efficient design, floor planning, incorporation of user requirements, services, parking, pedestrian circulation, spacing economy and earliest completion methodology.

15. **Conceptual Plan.** Conceptual design (Technical Proposal) shall be submitted by the (bidder) consultant within **04 weeks** after floating of this RFP as per date of submission indicated by the Employer. Sealed proposals shall be submitted in separate envelope(s) marked as “Technical Proposal” and “Financial Proposal” separately. Technical proposal shall be opened by NUTECH Bids Opening Committee in the Board Room in presence of Consultants/ Representative(s) on **7<sup>th</sup> October 2018 at 1530 hours.** Sealed proposals should be submitted to PMO, NUTECH at the given address (as below) by hand or through courier. Open, e-mailed or faxed documents shall not be accepted. Any document received by NUTECH after stipulated date and time of submission (**i.e. 7<sup>th</sup> October 2018 at 1430 hours**) will not be accepted and returned as unopened to the consultant (bidders). Both technical and financial proposal(s) should be separately sealed in two envelopes duly signed by the authorized representatives of the consultant(s) and submitted at the following address:

<b><u>Address:</u></b>	Project Management Office, National University of Technology, IJP Road, Sector I-12, Islamabad
<b><u>Contact No:</u></b>	051 - 5476768, 5476809

16. **Evaluation of Proposals**

- a. Consultant's proposals shall be evaluated under best value and highest score/points obtained on the basis of their respective technical and financial proposals. Technical and Financial Proposals shall bear the following weightage as per HEC Directives / Guidelines: -

(1)	Technical Proposal	70%
(2)	Financial Proposal	30%
	<b>Total:</b>	<b>100</b>

- b. NUTECH Technical Evaluation Committee shall award marks for each technical proposal strictly in accordance with the marking criteria enclosed with this RFP (Annexure 'B'). While evaluating the technical proposal / conceptual plan, Consultants' experience in design / execution of similar nature projects, financial profile encompassing highest value of contracts concluded in last seven years and resources in the context of experienced staff; particularly for fast track completion of similar projects would also be viewed.

- c. Financial proposals shall be opened (only) for those applicants whose design has been selected as substantially responsive by the Evaluation Committee/ NUTECH Project Board. Financial Evaluation shall be calculated as per (30%) weightage towards calculation of final score for successful bidder (consultant) who would be intimated in writing about date / time of opening of respective financial proposal(s).

17. **Submittals.** Successful Bidder shall be required to submit the following after receipt of Acceptance Letter / signing of contract: -

- a. 8 sets of Tender Documents/Drawings (complete in all aspects) for building works as well as HVAC along with soft copies.
- b. 3 copies of Construction Drawings including editable soft copy in required software / format.
- c. Soft draft copies of documents like advertisement for invitation to Bid for contractors, acceptance letter, contract agreement, mobilization, IPCs etc. for building and HVAC works.
- d. Project coordination / technical assistance
- e. Top Supervision mechanism
- f. Mid-course review / changes of design if required
- g. Render advice to the Employer on conflict situation
- h. Preparation of Inventories
- i. Miscellaneous design / project oriented drawings and documentation.

18. **Amendment of RFP.** At any time prior to the deadline for submission of proposals, NUTECH reserves the right to modify RFP through an addendum. Accordingly, the deadlines for submission of RFP would be considered for extension.

19. **Validity Period.** This RFP is valid for a period of **154 days** from the time and date of the submission of proposals which can be extended with mutual consent as per rules (if required).

20. **Agreement.** Successful bidder shall be required to sign a formal agreement with NUTECH as per Standard Forms of PEC.

21. **Remuneration.** To be included in Financial Proposal in the sealed envelope as part of the bid encompassing on following parameters: -

- a. Overall design process -----% of contract sum
- b. Periodical Top Supervision ----- Lump Sum / visit



22. **Mode of Payment.** Payments shall be made as per quoted costs for design and Top supervision. The payment mode(s) for each shall be as follows: -

a. **Design Stage**

S/No	Payment Schedule for Design		Quoted Cost of Consultancy % of Contract Sum
(1)	On Approval of Conceptual design by Competent authority and formalization of Agreement with consultant.	-	10
(2)	Submission of detailed design, BOQs, tender drawings/documents, taking off sheets and project & material specifications (in soft and hard copy).	-	15
(3)	External services, detailed drawings and Architectural renderings.	-	10
(4)	Design Changes co-ordination (if any) after tendering of construction contractor.	-	10
(5)	Provision of construction drawings.		20
(6)	Submission of HVAC, planning details, tender drawings / documents (in soft and hard copy).	-	10
(6)	Submission of Construction drawings for HVAC, Lifts and any other E/M works.	-	10
(7)	Completion stage / project closure after providing complete construction drawings of all works.	-	15

b. **Top Supervision Stage.** As per periodic visits of the project works as required by the Employer.

23. **Commencement of Services.** The Consultants shall commence the services immediately after the date of signing of Contract Agreement or such other time period as the parties may agree in writing.

24. **Extension of Time for Completion.** The increase in completion time shall be mutually agreed upon by both the parties in case additional services are essentially required.

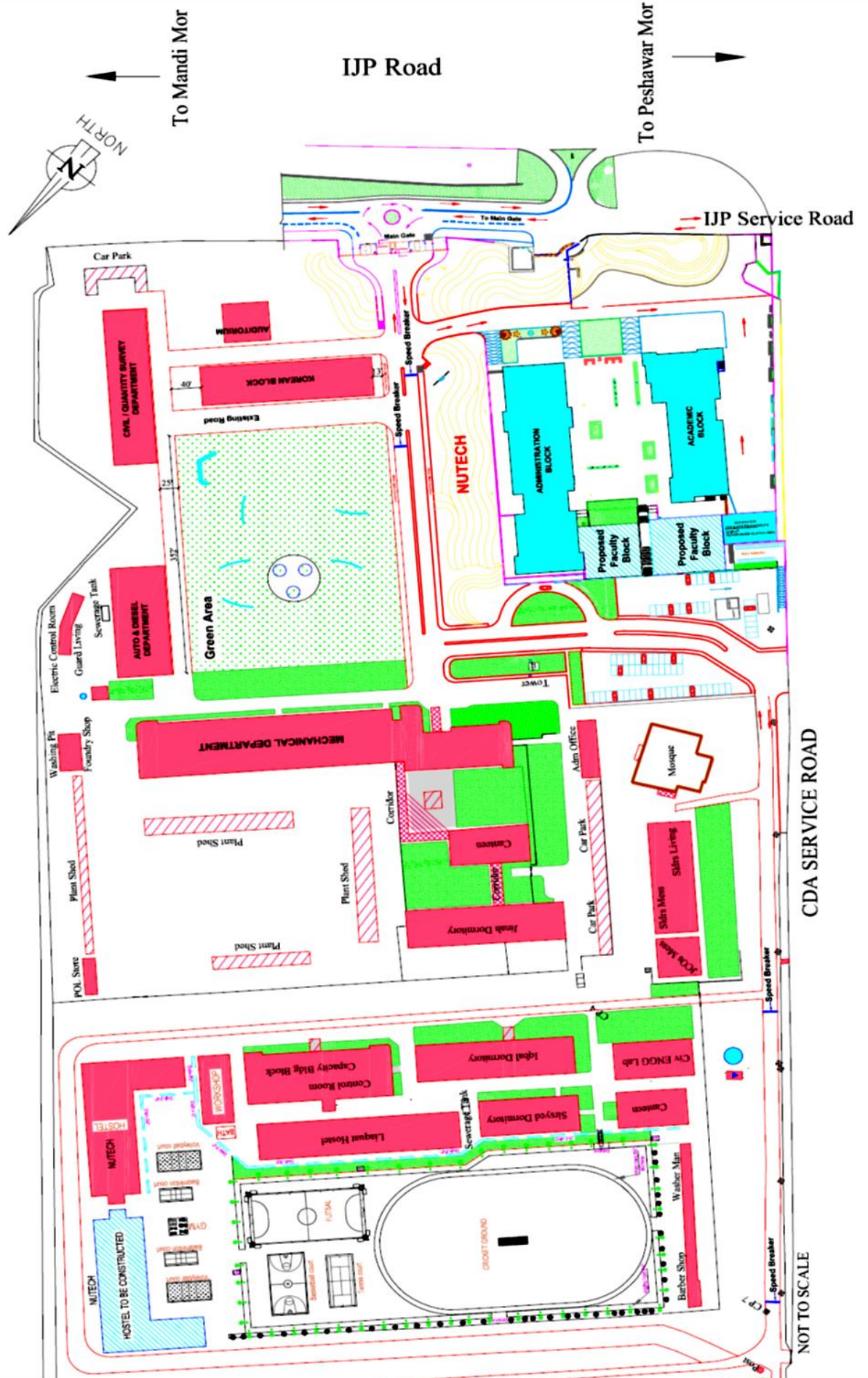
25. **Client's Prior Approval for Technical Staff.** The Consultants shall obtain the Client's prior approval in writing before taking any of, but not limited to appointing such Personnel; strictly in accordance with their qualification and experience.
26. NUTECH reserves the right to reject any or all applications and annul the proceedings as per provision rules.

PMO, NUTECH, IJP Road,  
Sector I-12, Islamabad  
Telephone: 051 – 5476809

No. 106/PMO/Svcs/01  
September 2019

**Deputy Assistant Director (Contracts)**  
Muhammad Ummad Saddozai

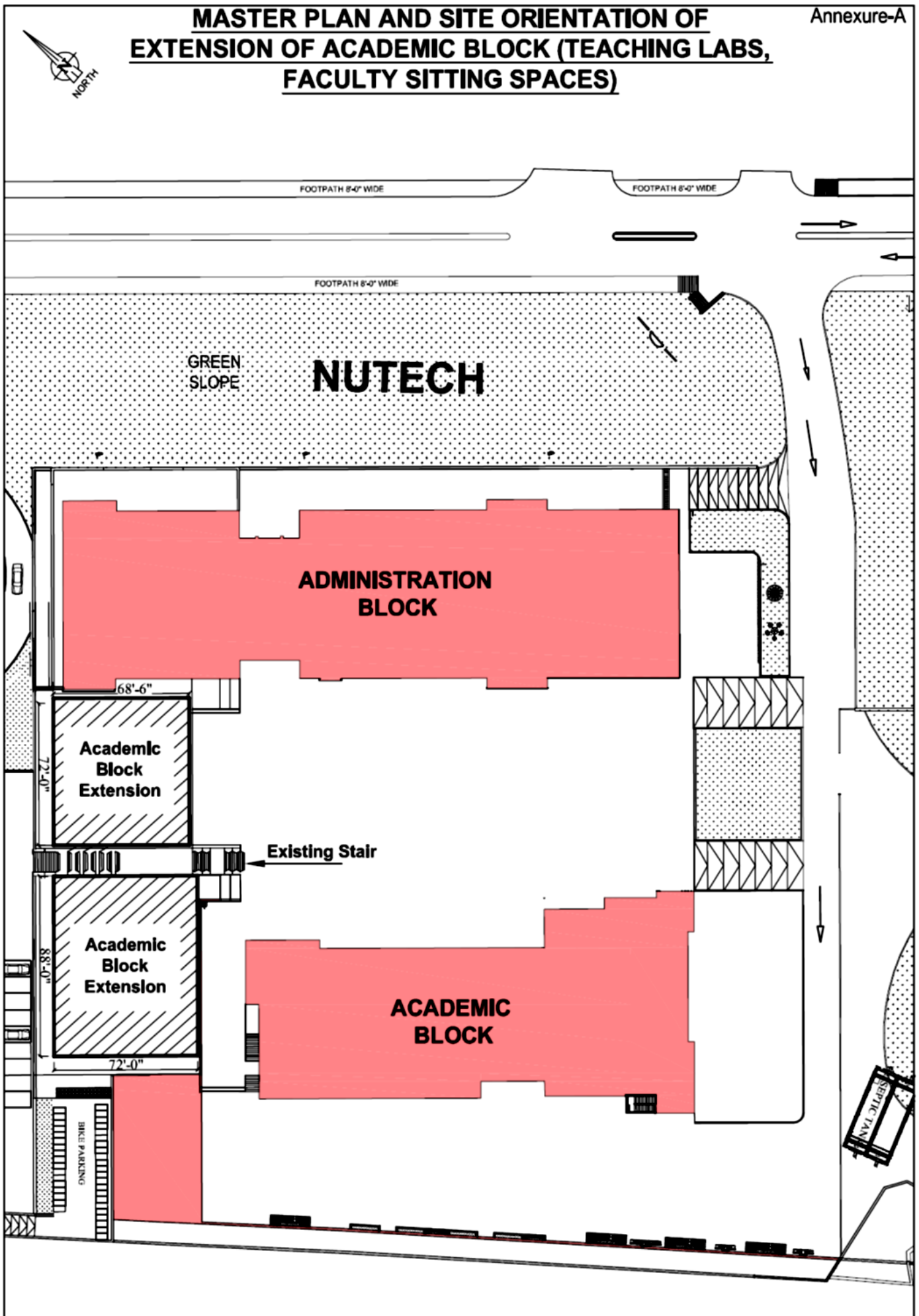
# MASTER PLAN NUTECH



NOT TO SCALE

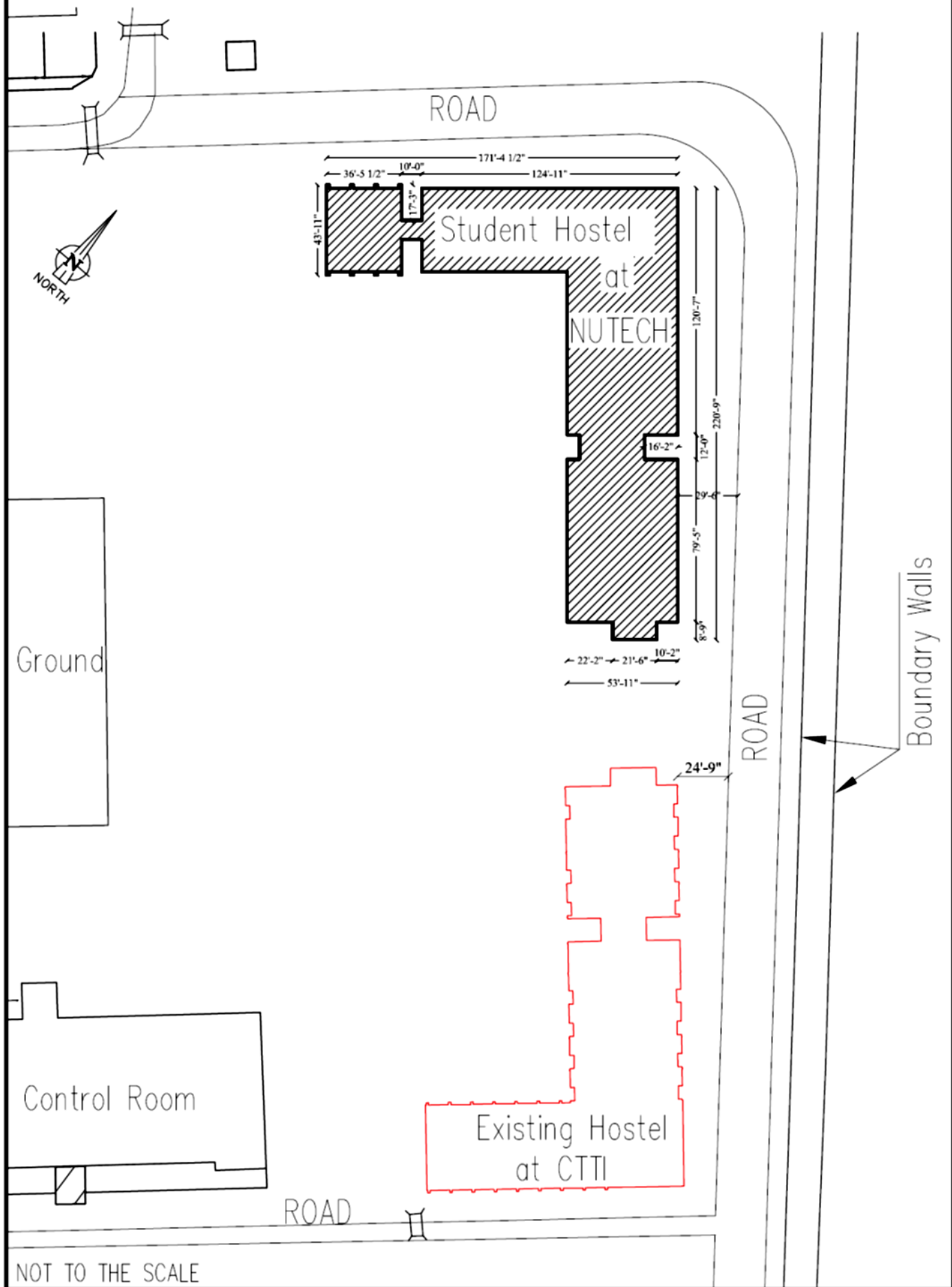
**MASTER PLAN AND SITE ORIENTATION OF  
EXTENSION OF ACADEMIC BLOCK (TEACHING LABS,  
FACULTY SITTING SPACES)**

Annexure-A



**MASTER PLAN AND SITE ORIENTATION OF STUDENT HOSTEL  
AT NUTECH**

Annexure-A



**TECHNICAL EVALUATION AND MARKING CRITERIA**  
**SCORE DISTRIBUTION**

Consultant	Work Methodology for fast track Completion perspective (10)	Economical & Energy Efficient Design in Proposal and in past projects (20)	Conceptual Plan, Floor Planning & Incorporation of User Requirement (15)	Internal & External Services, Parking & Pedestrian Circulation spaces (10)	Optics, elevation & facade Perspective (15)	Total Marks obtained out of (70)	Remarks

Note: In addition to above, past experiences, technical strength and financial.

**SUMMARY OF EXTERNAL WORKS**

<b>S/No</b>	<b>Works</b>
1.	External water supply, pump room
2.	Under ground water tank, pump house and filtration plant
3.	Details of cost estimates for internal roads and walkways works
4.	Firefighting hydrant system with pump room
5.	a. Sui gas installation & metering station
	b. Standby Generators
6.	Electric feeder (11 KV) substation, switching room, street lights
7.	Security cameras, walk-through gates, fence & lights
8.	Sewerage System
9.	Passenger & Cargo Lifts
10.	Backup Power & Transformers

**USER REQUIREMENTS**

- Develop conceptual / schematic plan and elevations to demonstrate visual character of building with internal and external spaces etc.
- Fast track development mechanism for earliest completion in 18 months' time frame
- Perspective view and line plan of the proposed building.
- Preparation of site landscape plans and Parking places
- Preferable useable area should be 60% of the building area
- Identification of roads, walkways, service corridors and network.
- Vertical transportation system (3 lifts including one cargo lift)
- External services including parking, walkways
- Land usage and Pedestrian circulation plan.
- Provision of prompt services i.e. water supply, power (including standby power) drainage, sanitation, and telecommunications.
- Design parameters to economize the project cost.
- Community bath rooms (where required).
- MEP services (including underground and overhead water tanks)
- Detailed drawings (to scale of 1/8", 1/2" and 1" as necessary)
- Low, medium and high electric system
- Central and independent HVAC system
- Access control and monitoring security system
- IT system (Active and Passive)
- Reverse Osmosis (RO) / water treatment Plant
- Firefighting systems (active & passive)
- Incorporating any amended instructions received from the client.
- Specifications for fittings, fixtures, finishing materials with make and type.
- Telephone communication
- Uninterrupted electric supply



**TEACHING LABS, FACULTY SITTING SPACES ETC**  
**FLOOR PLANS**

<b>FLOOR</b>	<b>FACULTY</b>	<b>AREA</b>
<b>Basement</b>	Complete Floor for Labs	8009
<b>Ground Floor</b>	Complete Floor for Labs	7186
<b>1<sup>st</sup> floor</b>	Complete Floor for Labs	7186
<b>2<sup>nd</sup> floor</b>	Complete Floor for Labs	7186
<b>3<sup>rd</sup> Floor</b>	3x Dean Offices	2877
	1x Conference Room	1350
	Labs Area	2954
<b>4<sup>th</sup> Floor</b>	2x Faculty Departments	4416
	2x Faculty Lounge	1900
	Female Prayer Area	788
<b>5<sup>th</sup> Floor</b>	3x Faculty Departments	6340
	Faculty Lounge	797
<b>6<sup>th</sup> Floor</b>	3x Faculty Departments	6340
	Store	797
<b>Hierarchy of Faculty Department</b>	(1x Professor , 3x Associate Professors, 6x Assistant Professors, 10x Lecturers, 5x staff)	

**STUDENTS HOSTEL****FLOOR PLANS**

<b>FLOOR</b>	<b>FACULTY</b>	<b>AREA</b>
<b>Ground Floor</b>	Kitchen + Store	1382
	Dining Hall	2550
	2x Offices	709
	14x Male Rooms	4515
	2x Handicap Rooms	645
	Store	323
	Mess Staff Room	323
	Reception	195
<b>1<sup>st</sup> floor</b>	16x Male Rooms	5160
	10x Female Rooms	1512
	Laundry Room	153
	TV Room	972
	Warden Room	153
<b>2<sup>nd</sup> floor</b>	20x Male Rooms	5160
	8x Female Rooms	1560
	Laundry Room	153
	Prayer Hall	972
<b>3<sup>rd</sup> floor</b>	8x Female Rooms	1560
	Laundry Room	153
	13x Male Rooms	3354
	Hostel Staff	323
	Warden Staff	516
	Laundry	323
	Prayer Area	669
	TV Room	972

**VISITING FACULTY HOSTEL****FLOOR PLANS**

<b>FLOOR</b>	<b>FACULTY</b>	<b>AREA</b>
<b>Ground Floor</b>	3x Suites	936
	3x Living Rooms	648
	Handicap Room	216
	Mess Staff	216
	Store	216
	Prayer Area	260
	TV Room	600
	Dining Hall	800
	Kitchen	523
<b>1<sup>st</sup> floor</b>	9x Suites	2901
	8x Living Rooms	1806