

# INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD

Towards developing a Campus Master Plan for Main  
Campus of IIT (ISM) Dhanbad

## REQUEST FOR PROPOSAL



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## Table of Contents

<b>Section</b>	<b>Title</b>	<b>Page No.</b>
Section 1	Introduction	4-6
Section 2	Institute	7-8
Section 3	Main Campus & It's Requirements	9-15
Section 4	Master Plan	16-18
Section 5	Site & Its' Environs	19-25
Section 6	Scope of Work, Completion Schedule & Schedule of Fees	26-42
Section 7	Terms & General Conditions	43-56
Section 8	Selection Process & Submission of Proposal	57-65
Section 9	Annexure	66-83
Section 10	Drawings	88-89

## SECTION 1

### INTRODUCTION

- (1.1) Indian Institute of Technology (ISM) Dhanbad hereinafter called “the Institute/IITISM which term shall include its duly authorized representatives and assigns”, wishes to redevelop its Main Campus as a “Smart-Intelligent Eco-Campus”, hereinafter called “the Project”, in an area of 393 Acres, hereinafter called “the Site”.
- (1.2) The Consultant responsible for the preparation of Campus Master Plan (Re-CMP) of the Main Campus of IITISM, hereinafter called ‘The Consultant CMP/Co-CMP’, shall be selected through the response of Request for Proposal.
- (1.3) The Re-CMP shall include architectural and urban design guidelines, requirement and configuration of buildings, and linkages that are required and shall be provided in respect of building services and transport linkages.
- (1.4) As a part of the process of selection of reputed Indian organizations or consortium led by Indian organizations having proven professional capabilities in preparation and monitoring of Master Plan of large campuses, proposals are hereby invited from reputed organizations or consortia of not more than three organizations that possess proven professional capabilities in Campus Master Plan of the large campus, and are eligible as per the primary eligibility criteria contained in this document. Such organization or consortium is hereinafter referred to as “Applicant”. (Please refer Annexure 3 for the primary eligibility criteria.)
- (1.5) Applicants may be reputed and experienced Architects/Architectural Firms or a Consortium of Firms, of not more than three organizations, with one of the Architectural Firm as their lead member.
- (1.6) Consultants/Firms may associate with each other to form a consortium to complement their respective areas of expertise, or for other reasons. Such an association may be for the long term (independent of any particular assignment) or for a specific assignment. The consortium may take the form of a joint venture or of a sub consultancy. In case of a joint venture, all members of the joint venture shall sign the contract and shall be jointly and severally liable for the entire assignment.
- (1.7) Consortia will be considered eligible only if the same are formed by a legal document with clear indication of the duties and responsibilities of each partner in the implementation of this consultancy assignment. Notarized copy of such document along with the power of attorney instrument for the authorized signatory of the consortium are to be submitted along with technical bid without which the

bid proposal will be summarily rejected. Please also refer Annexure 8 for the format of the Letter of Consortium to be submitted along with the aforementioned legal documents.

- (1.8) The RFP document can be downloaded from the institute's website ([www.iitism.ac.in](http://www.iitism.ac.in)). The document can also be sought from the address below during office hours on all working days from 05 April 2022 till 29 April 2022:

**The Director**

Indian Institute of Technology (ISM) Dhanbad  
Main Campus  
Dhanbad 826 004  
(Jharkhand)

- (1.9) This Request for Proposal (RFP) is addressed to only those applicants that may be eligible as per the primary eligibility criteria contained in this document. The purpose of this RFP document is to provide information to the eligible applicants for preparation of their proposals for the selection process.
- (1.10) An Applicant is permitted to submit proposals for any one of the two categories (not both) of buildings as listed in para 1.5 above, subject to eligibility as per the primary eligibility criteria for the respective category.
- (1.11) No independent Applicant or constituent of a consortium shall be permitted to apply in more than one category either as an independent Applicant or as part of another consortium and such applications shall be summarily rejected.
- (1.12) Neither the CMP Consultant nor any of its constituent partners or consultants are permitted to be part of any Applicant, either as an independent Applicant or as a constituent of a consortium, and such Applicants shall be summarily rejected.
- (1.13) Information contained in this RFP document reflects various assumptions and assessment based on current understanding of the Institute. Each applicant may require to augment this information with their own experience to develop and submit technical and financial proposals.
- (1.14) Applicants are expected to make their own assessment and satisfy themselves fully with all aspects of the Institute's structure, Project needs, Site conditions, local environment, functional and statutory requirements for development of the various components of such a campus and accordingly make proposals.
- (1.15) Applicants are required to submit their proposals strictly according to the terms and conditions and in the form and manner as specified in this document.

- (1.16) Applicants are required to submit a non-refundable processing fee of Rs. Twenty Thousand (Rs. 20,000) in the form of demand draft drawn in favour of “Indian Institute of Technology (ISM) Dhanbad” payable at Dhanbad along with Part-A submission (refer para 10 for details of Part-A submission).
- (1.17) Applications submitted without the requisite processing fees or without mention of the respective category of buildings applied for may be summarily rejected.
- (1.18) In case of consortium, the Institute shall deal with only the lead member of the consortium for all purposes.
- (1.19) The Institute reserves the right to award any part of the project to one or more consultant or consortium as selected or to any other firm or consortium as per sole discretion of the Institute.
- (1.20) The Institute reserves the right to cancel this RFP at any stage without any liability or any obligation, and without assigning any reason.
- (1.21) The progress of the work will be monitored by a committee on monthly basis. If the quality or progress of work is not found satisfactory, then the contract would be terminated without notice at the sole discretion of the Institute.

## SECTION 2

### THE INSTITUTE

(2.1) The Indian National Congress at its XVII Session of December 1901 passed a resolution stating that “in view of the fact that the tendency of recent legislation namely, The Indian Mines Act VII of 1901, is that all Indian mines must be kept under the supervision of mining experts, the Congress is of opinion that a Government College of Mining Engineering be established in some suitable place in India on the models of the Royal School of Mines in England, Mining Colleges of Japan and at other places in the continent”. The McPherson Committee formed by Govt. of India, recommended the establishment of an institution for imparting education in the fields of Mining and Geology, whose report, submitted in 1920, formed the main basis for establishment of the Indian School of Mines, Dhanbad. The Indian School of Mines was formally opened on 9th December 1926, by Lord Irwin, the then Viceroy of India to address the need for trained manpower related to mining activities in the country with disciplines of Mining and Applied Geology. In 1967 it was granted the status of a deemed to be university under Section 3 of UGC Act, 1956. Since its establishment, IIT(ISM) has undergone considerable expansion of its activities, and presently it can be considered as a total technology education institute. Indian School of Mines (ISM) was awarded the tag of an Indian Institute of Technology (IIT) on 06 September 2016.

(2.2) IITISM has, so far, established two Centers of Excellence (CoE):

- (a) Centre for Renewable Energy
- (b) Centre Research Facility

(2.3) IITISM presently offers programs in the following disciplines:

<i><b>B.Tech.</b></i>	<i><b>B.E.</b></i>	<i><b>Dual Degree</b></i>	<i><b>Integrated M.Tech</b></i>	<i><b>JRF Full Time</b></i>	<i><b>JRF Part Time</b></i>	<i><b>M.Sc</b></i>	<i><b>M.Sc Tech</b></i>	<i><b>M.Tech</b></i>	<i><b>MBA</b></i>
3560	1	43	390	938	473	285	283	746	86

#### Courses Offered by IIT (ISM) Dhanbad

##### *(A) B.Tech Course – (04 Years)*

- (1) Mining Engineering
- (2) Chemical Engineering
- (3) Civil Engineering
- (4) Computer Science
- (5) Electrical Engineering
- (6) Electronics and Communication Engineering

- (7) Electronics and Instrumentation Engineering
- (8) Engineering Physics
- (9) Environmental Science and Engineering
- (10) Mechanical Engineering
- (11) Fuel Minerals and Metallurgical Engineering
- (12) Mining Machinery Engineering
- (13) Petroleum Engineering

**(B) 5 Years Dual Degree/Int. M.Tech - (05 Years)**

- (1) Applied Geology
- (2) Applied Geophysics
- (3) Mathematics & Computing

**(C) M.Tech Course - (02 Years)**

- (1) Mining Machinery Engineering
- (2) Environmental Engineering
- (3) Mineral Exploration
- (4) Mineral Engineering
- (5) Engineering Geology
- (6) Petroleum Exploration
- (7) Open Cast Mining
- (8) Mining Engineering
- (9) Geomatics
- (10) Underground space technology
- (11) Computer Science Engineering
- (12) Electronics and Communication
- (13) Thermal Engineering
- (14) Maintenance and Tribology
- (15) Mechanical Engineering (Manufacturing)
- (16) Mechanical Engineering (Design)
- (17) Chemical Engineering
- (18) Power Electronics and Electrical derives
- (19) Power System Engineering, RF & Microwave Engineering
- (20) VLSI Design
- (21) Communication and Signal Processing
- (22) Opto Electronics and Optical Communication Engineering
- (23) Earth Quake Science and Engineering
- (24) Fuel Engineering
- (25) Geotechnical Engineering
- (26) Industrial Engineering & Management
- (27) Mine Electrical & Engineering

**(D) M. Sc. - (02 Years)**

- (1) Chemistry
- (2) Physics
- (3) Mathematics & Computing



**(E) MSc Tech Course – (03 Years)**

- (1) Applied Geology
- (2) Applied Geophysics

**(F) MBA Program – (02 Years)**

**(G) Ph.D**

**(H) Post-Doctoral Fellowships**

**(2.4) IITISM aims to:**

- (a) Impart quality education at undergraduate, postgraduate, doctoral and postdoctoral levels in engineering and other disciplines.
- (b) Fulfil the Institute's academic mission in a manner that is socially, economically and environmentally sustainable.
- (c) Provide solutions to the problems of depletion of the earth's finite and, largely, non-renewable energy resources by exploiting the role of renewable energy in sustainable infrastructure development.
- (d) Harness the potential of technological advances and state-of-the-art technology, alongside traditional wisdoms in developmental and design practices to meet the environmental and other challenges.

**(2.5) To realize these aims, and to provide a compelling model for future communities, the Institute wishes to develop its campus at Dhanbad as a "Smart-Intelligent Eco-Campus" by a Master Plan containing the existing elements and consideration of future element with expansion plan.**

**(2.6) Additionally, the campus is intended to serve its students and the larger campus community as a "Living Laboratory", its purpose being to demonstrate, embed, explore, invent, research and refine systems, devices and technology.**

**(2.7) Projected Strength of Students, Faculty and Staff:**

*Students' vs Faculty and Staff*

	2017-18	2022-23	2027-28	2032-33	2037-38	2042-43
	Phase 0	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
Students	7500	8100	8700	9300	9900	10500
Faculty	290	810	870	930	990	1050
Staff	264	891	957	1023	1089	1155
Total	8154	9072	10527	11253	10999	12705

*Students, Faculty and Staff population chart*

	2017-18	2022-23	2027-28	2032-33	2037-38	2042-43
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	<i>Phase 0</i>	<i>Phase 1</i>	<i>Phase 2</i>	<i>Phase 3</i>	<i>Phase 4</i>	<i>Phase 5</i>
<i>Students</i>	7500	8100	8700	9300	9900	10500
<i>Faculty</i>	1160	3240	3480	3720	3960	4200
<i>Staff</i>	1056	3564	3828	4092	4356	4620
<i>Total</i>	9716	14904	16008	17112	18216	19320

### SECTION 3

## THE MAIN CAMPUS & REQUIREMENT OF THE CAMPUS

#### (3.1) The Main Campus

- (3.1.1) An area of 218 Acres, located in the middle of Dhanbad city along National Highway 32, already having built forms and services, serving a population of 10500 is available for revised planning and development as the Main Campus of IITISM.
- (3.1.2) The fully residential campus is already catering 6522 students in different Hostels. In long term perspective, this campus shall cater to 10000 students by the year 2050 in phased manner. As per the approved norms, faculty student ratio will be 1:10 and the Faculty and Non-faculty staff ratio is 1:1.1. Besides this, strength of Visiting Faculty may be around 25% of the regular Faculty.
- (3.1.3) IITISM is desirous of meeting its academic mission in a manner that is socially, economically and environmentally sustainable. It believes that local materials, construction practices and the repository of knowledge and traditional wisdom, when combined with modern technology and innovation, go a long way in ensuring sustainability at a low cost.
- (3.1.4) To realize this, and to provide a compelling model for future communities, the campus of IITISM is to be re-developed as a 'smart, intelligent eco-campus'. Additionally, the campus is intended to serve its students and the larger campus community as a "Living Laboratory", its purpose being to demonstrate, embed, explore, invent, research and refine systems, devices and technology.
- (3.1.5) As an eco-campus, sustainability and environmental sensitivity shall be emphasized at all levels. Its pattern shall be driven by stewarding natural resources and based on renewable energy. This eco-campus shall function 24x7, 365 days of the year. The whole campus shall be built as Green Belt Zone all along as an urban social forest and whole of the campus is intended to be ecologically developed, nurtured and utilized for a wide range of agricultural activities, including horticulture, floriculture, fruit orchards, herbs and desert medicinal plants etc. The campus community may grow grain, and other agricultural produce, for its own use and/or demonstration purposes, using entirely ecological methods.

- (3.1.6) The eco-campus is to be developed not only on the ground but underneath it as well, with systematically recharged subsurface water wells and tanks providing safe, sufficient and pure drinking water.
- (3.1.7) A well-planned, environment-friendly reed-bed zone wastewater system and other, new biological technologies shall help in reducing dependence on public utilities, while providing nutrient-rich additives for soil regeneration.
- (3.1.8) Wherever required and possible/practical, solar panels, micro wind turbines and other such renewable energy sources shall be used to cater to the basic needs of the community not only taking it "off the grid" but, perhaps, reversing the direction of resource flow.
- (3.1.9) The Institute expects to be redeveloped as a "smart, intelligent eco-campus" connected through a scalable, rhizomatic, smart network built for superior performance and agility to absorb unforeseen changes in handling and operability.
- (3.1.10) **The final goal is to have a campus that is *TOWARDS NET ZERO WASTE, NET ZERO ENERGY AND NET ZERO WATER***, thus reaching full range self-sufficiency within next 05 years. These will be based on global best-practices and technologies, including respect for local constraints, resources and skills, and the requirements of the Government of India's procurement systems.

(3.2) Requirements of the Campus

- (3.2.1) In order to realize the vision of a sustainable eco-campus development, IIT(ISM) Dhanbad intends to develop a Campus Master Plan, hereinafter referred to as CMP/the Master Plan, after examining the updated development, carrying capacity of the land available and ecological analysis. The CMP shall provide appropriate methods, designs, details, policies, guidelines, development models, systems and strategies to:
  - (a) Provide sustainability policies to promote sustainable design and operation of campus functions;
  - (b) Maximize the utilization of ecological potential of the site in land use, energy, food and other resource generation;
  - (c) Minimize the energy and resource consumption;
  - (d) Protect, harvest and conserve water;
  - (e) Minimize waste;
  - (f) Use environmentally-friendly products and materials ;
  - (g) Enhance indoor environmental quality;

- (h) Optimize operational and maintenance practices;
  - (i) Suggest a strategy wherein the performance of all of the above (and, perhaps, any others) can be continuously monitored and evaluated
- (3.2.2) The CMP shall be a comprehensive referral document for sustainable development of infrastructure and buildings as are required to fulfil the aims of the Institute as outlined. The CMP must provide orientation, guidance and inspiration, to all stakeholders for all time to come.
- (3.2.3) The CMP shall include revised planning and design towards, but not be limited to:
  - (a) Campus level urban design, architectural, landscape and services;
  - (b) Strategic framework to ensure integrated sustainability throughout the process of design, development and operation for: Phased development, alternative energy, materials and finishes, site elements and site furniture, campus art, exterior lighting, signage & way-finding, engineering and allied services, future land use policy and campus management procedures.
  - (c) Campus-level and zone-wise urban design, architectural, landscape and services.
- (3.2.4) Sustainability and Environmental sensitivity
  - (a) IIT(ISM) DHANBAD intends to carry all campus development works forward by taking an Ecosystem Services approach that explores development methods which depend on ecosystems, and not merely those that affect ecosystems.
  - (b) The CMP must allow the identification and exploitation of eco-potentials. It must enhance the flow and benefits of ecosystem services by influencing modes of production, procurement and creating incentives. It must promote participatory systems that localize energy, food, materials and local product
  - (c) The ecosystems, and the scales on which they deliver services, shall be mandated, at the Master Plan level, as the key building blocks for spatial analysis, planning and design, instead of archaic unit area norms.
  - (d) As an eco-campus, sustainability and environmental sensitivity shall be emphasized at all levels. Its pattern shall be driven by stewarding natural resources and based on renewable energy. This eco-campus shall function 24x7, for 365 days of the year.
  - (e) The CMP must propose water-sensitive design that uses the complete water cycle. The eco-campus shall possess systematically recharged

subsurface water wells and tanks providing safe, sufficient and pure drinking water.

- (f) A well-planned, environment-friendly wastewater system and other, new biological technologies shall help in reducing dependence on public utilities, while providing nutrient-rich additives for soil regeneration. It must also promote the use of waste products to satisfy energy and material resource needs.
- (g) Wherever required and possible/practical, solar PV and/or Solar Thermal shall be used to cater to the basic needs of the community not only taking it "off the grid" but, perhaps, reversing the direction of resource flow.
- (h) The final goal is to have a campus that is *Towards Net Zero Waste, Net Zero Energy and Net Zero Water*, reaching full range self-sufficiency over a period. This goal will be attained through global best-practices and technologies, including respect for local constraints, resources and skills, and the requirements of the Government of India's procurement systems.
- (i) Sustainability initiatives shall need to be performance-based and shall be continuously monitored to ensure that they provide good value for investments that the Institute makes.

(3.2.5) Smart, Intelligent and Converged Campus Network

- (a) ICT convergence plays a huge role in reducing the overall energy impact – from dematerialization due to converged infrastructure, enhanced energy management via intelligent networks and policies to greenhouse gas savings via the use of collaborative technologies.
- (b) IIT(ISM) DHANBAD's vision of a "Smart and Intelligent Eco-Campus" is one in which the foundation will be converged digital infrastructure and the information it carries, enabling the delivery of vital services from integrated facility operations management, utilities management to seamless connectivity, and access to education, healthcare and infotainment services – thereby transforming the community and the lives of the people who will work and learn there.
- (c) The network will be THE platform to plan, build, monitor and manage daily operations and systems in the campus with expected gains in the operational excellence of campus community life, enhanced productivity among faculty, students, employees and improved access to sustainable smart ICT services.
- (d) The CMP shall focus on creating a converged digital infrastructure for the campus and shall be integrated and tightly coupled with the physical infrastructure and ecological design created by the identified campus master planner(s).

- (e) The CMP shall assess any current plan(s), identified systems and services and benchmark against converged designs, systems and services in developed nations. It shall propose key services; feasible operating and business models for all relevant ICT stakeholders and project master planners and propose a coordinated implementation plan.
- (f) The CMP framework must not simply identify constraints but actively identify and uncover potential for converged and sustainable services and ICT best practices in achieving the overall project vision and ecological performance indicators such as net zero waste, net zero energy, smart micro-grid usage of renewable/non-renewable sources and overall self-sufficiency in resource management.
- (g) The CMP shall provide orientation and guidance for all key stakeholders and campus managers to include the proposed design guidelines and ICT services in policies in order to assist in the creation of a sustainable future for the IIT resident communities both present, and in times to come.

#### (3.2.6) Campus Development

- (a) It is expected to cater to about 10500 students in different academic streams by the year 2050.
- (b) As per approved norms, the ratio of faculty to students will be 1:10. The ratio of faculty to non-faculty staff is 1:1.1. Besides this, the strength of visiting faculty may be around 25% of the regular faculty.
- (c) Modularity of built spaces shall be emphasized to help multiply the built areas for various zones/departments etc. as per future needs without relocation or scatter.
- (d) Campus planning shall address the interactive aspects of various buildings and departments so as to provide flexibility of space integration for both, emerging as well as unforeseen, multi-disciplinary futuristic academic and research fields.
- (e) It is intended that most built spaces within the campus shall be naturally lit during daylight hours.
- (f) Further, there shall have to be substantial and well-articulated, airy and naturally lit internal circulation/mobility systems.
- (g) The campus would primarily be redeveloped with the following 'ZONES' and their interconnections, as the planned-space components:

Zone	Description
Academic	Instructional Area, Faculty offices, Administrative Buildings, Library, Research laboratories, Workshop, Engineering offices, etc

Residential	Faculty & Officers housing, Staff housing, studio apartments for visiting faculty and others, housing for married students, club complexes, etc
Hostel	Hostels, Dining Halls and Common Rooms, Students' Activity Centre, etc
Sports	Indoor and outdoor sports facilities, etc
Outreach	Convention Centre Complex, Collaborative Centers, etc
Transportation	Public transport systems, movement corridors, and subways, underground tunnels, over bridges, covered and open parking for cars and bicycles, fuel stations, charging stations, service centers, workshops etc
Supportive Facilities	Shopping centers with banks, cafeteria etc., domestic gas station, tuck shops/ kiosks spread around the campus in strategic locations, Health Centre and hospital, etc
Utilities and Services	Network of electric substations, localized generation systems, grids, panels, charging stations, renewable energy generation systems (solar, bio-fuel, etc.), HVAC systems, fire safety measures and systems, conventional and renewable resources such as water supply networks, tanks, pumping stations, rainwater harvesting and recharge systems including tanks and ponds etc., sewerage systems and treatment plants, solid waste management systems, solar water-heating systems, weather monitoring stations and security systems, recycling facilities etc
Green	Informal and formal gathering spaces, open air theatres etc., Nursery, Formal Parks, Walking trails, Jogging tracks, Biodiversity Parks, Woodlands and Urban Forests, Floriculture, Fruit Orchards, Water Bodies connected to Watershed management systems, Zone for Reed Bed, vermicomposting etc

*These areas are indicative only; and are solely for the purpose of proposals to be submitted in response to this RFP.*

- (h) The applicants must broadly adhere to these areas in their technical proposals. This will help the Jury to evaluate proposals on parity.
- (i) For the present, these areas may be seen as built-up area requirements.

Zone	Built-up Area (m <sup>2</sup> )					
	Current	For Planning				
	2017-18	2022-23	2027-28	2032-33	2037-38	2042-43
	Phase 0	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
Academic	137946					
Residential	68073					
Hostel	118473					
Sports	44375					
Outreach	7686					
Transportation						
Supportive Facilities	10717					
Utilities and Services	4680					



Green						
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## Current Built-up Area Break-up

### Academic Building

Sl. No.	Buildings	Area (m <sup>2</sup> )
1	Academic Complex (G+6)	33578
2	Main Heritage Building	6000
3	Old Lecture Hall Complex	5100
4	New Lecture Hall Complex	11707
5	Environmental Science Building	1300
6	Computer Science Engineering	880
7	Management Studies Building	1100
8	Fuel and Mineral Engineering Building	350
9	Mechanical and Mining Machinery Engg. Building	2700
10	Science Block Building	1300
11	Petroleum Engineering Building	11707
12	Vertical Extension of Science Block	1183
13	Vertical Extension of Management Studies	375
14	Vertical Extension of Computer Centre	620
15	Vertical Extension of Fuel & Mineral Engg. Dept.	1100
16	Vertical Extension of Petroleum Engg. Dept.	1220
17	Vertical Extension of Environmental Science & Engg.	1173
18	Vertical Extension of Applied Geophysics	606
19	Annex building of Petroleum Engg. Department	11707
20	Administrative Building	3000
21	Old Library Building	1500
22	New Central Library	21268
23	Central Research Facility	13120
24	New Workshop Building	1551
25	Old Workshop Building	2601
26	Longwall	1200
	<b>Total</b>	<b>137946</b>

### Residential Buildings

S. No.	Type	Block	Area for one Unit (m <sup>2</sup> )	Number of Units	Total Area (m <sup>2</sup> )
1	Type VI	(180 Flats)	203.40	60	12204
2	Type V	(180 Flats)	149.23	120	17907.60
3	Type VI	Type VI/1-2 (2 Storied)	142.30	2	284.60
4	Type V	(48 Flat)	131.02	48	6288.96
		(UGC)	142.57	20	2851.40
		(E Type)	100.04	20	2000.80
		(Bungalow)	131.65	6	789.90
5	Type IV (Special)	150 Flats	82.50	150	12375.00
6	Type IV	40 (Old-D)	65.46	40	2618.40
		12 (C/02)	57.40	12	688.80
		12 (N/D)	52.58	12	630.96
		08 (C-Old)	65.02	8	520.16
		02 (Bungalow)	135.89	2	271.78
7	Type III	32 Qtr.	44.31	32	1417.92
		08 Qtr	49.83	8	398.64
		12 Qtr	49.84	12	598.08
		01 Qtr	65.02	1	65.02
		01 Qtr	73.52	1	73.52

		02 Qtr	100.53	2	201.06
8	Type II	Type II (1-32)	37.16	32	1189.12
		Type II (41-64)	37.16	24	891.84
		Type II (65-74)	38.39	10	383.90
		NBCC			
		Type II (99-110)	39.01	12	468.12
		Type II/H (1-15)	38.46	15	576.90
		Type II/V (1-7)	37.40	7	261.80
		Type II Isolated Ward (1-2)	48.30	2	96.60
9	Type I	Type II Converted (1-12)	45.51	12	546.12
		(Old-G)	24.24	17	412.08
		(Type-I)	25.00	24	600.00
		(New-G)	24.24	19	460.56
	<b>Total</b>				<b>68072.74</b>

### **Hostel Buildings**

S. No.	Hostel Area	Area (m <sup>2</sup> )
1	International EDC	1005.36
2	International Hostel	3025.09
3	Jasper Hostel	35841.02
4	Emerald Hostel	2400.87
5	Amber Hostel	21979.98
6	Topaz hostel	3001.09
7	Sapphire	6502.36
8	Opal	2400.87
9	Diamond	3201.16
10(a)	Rosaline-I	10704.88
10(b)	Rosaline-II	25009.08
11	Ruby hostel	900.32
12	Ruby Annex	1200.43
13	Ruby New	1300.47
	<b>Total</b>	<b>118472.98</b>

### **Sports Zone and Buildings**

S. No.	Name of the Location	Area (m <sup>2</sup> )
1	Student Activity Centre	10524.00
2	Swimming Pool Centre	2401.00
3	Squash Complex	250.09
4	Lower Ground	18000.00
5	Upper Ground	13200.00
	<b>Total</b>	<b>44375.09</b>

### **Outreach Centers**

S. No.	Name of the Location	Area (m <sup>2</sup> )
1	Centre of Excellence	1480.54
2	Multipurpose Complex	6205.00
	<b>Total</b>	<b>7685.54</b>

***Support Facility***

<i>S. No.</i>	<i>Name of the Location</i>	<i>Area (m<sup>2</sup>)</i>
1	Senior Academic Hostel	1800.65
2	ISM Staff Club	1650.59
3	Scolomin Club	170.06
4	Temple	150.00
5	Executive Development Centre	1480.50
6	New Health Centre	2845.00
7	New Post Office	350.00
8	GJLT Auditorium	800.00
9	Penman Auditorium	850.00
10	Main Canteen	320.00
11	Ramdhani Chowk	300.00
	<b><i>Total</i></b>	<b><i>10716.80</i></b>

***Utilities and Services***

<i>S. No.</i>	<i>Name of the Location</i>	<i>Area (m<sup>2</sup>)</i>
1	STP-1	640
2	STP-2	500
3	STP-3	440
4	Sub-Station 1	600
5	Sub-Station-2	900
6	Sub-Station-3	1600
	<b><i>Total</i></b>	<b><i>4680</i></b>

- (j) Augmentation of water storage capacity, as per Master Plan proposals, may also be planned.
- (k) The Institute expects, and strongly encourages, the Consultant to explore innovation in all spheres of the Campus Master Plan design, development, implementation and monitoring; present path breaking solutions; provide creative inputs, fresh ideas and new idioms for the expression of spatial needs, sustainability issues and other requirements, as mentioned in the RFP document. Due credit shall be given to such ideas and innovations.

## **SECTION 4**

### **MASTER PLAN**

- (4.1) In order to realize this vision of a sustainable eco-campus development, IITISM intends to redevelop a Campus Master Plan after examining the carrying capacity of the land available and ecological analysis. The Campus Master Plan shall:
  - (4.1.1) Provide sustainability policies to promote sustainable design and operation of campus functions;
  - (4.1.2) Maximize the potential of the site;
  - (4.1.3) Minimize the energy and resource consumption;
  - (4.1.4) Protect and conserve water;
  - (4.1.5) Use environmentally-friendly products and materials;
  - (4.1.6) Enhance indoor environmental quality;
  - (4.1.7) Optimize operational and maintenance practices;
  - (4.1.8) Suggest a strategy wherein the performance of all of the above (and, perhaps, any others) can be continuously monitored and evaluated
- (4.2) The Campus Master Plan must meet the best practices / standards / provisions as applicable to ecologically-sustainable design in humid subtropical climate and tropical wet and dry climate conditions, and which result in efficient use of energy, water and other natural resources.
- (4.3) Sustainability initiatives shall need to be performance-based and shall be continuously monitored to ensure that they provide good value for investments that the Institute makes.
- (4.4) Communities depend on the nature. Healthy ecosystems regulate climate, meet energy needs, prevent soil erosion and natural hazards, and offer opportunities for symbiotic teaching-learning, spiritual fulfillment, cultural inspiration and recreation. Thus, rather than simply identifying eco-constraints, the Master Plan must allow for the identification and exploitation of eco-potentials. It must enhance the flow and benefits of ecosystem services by influencing modes of production, procurement and creating incentives. It must promote participatory systems that localize energy, food, materials and local production.
- (4.5) The Campus Master Plan must propose water-sensitive design that uses the complete water cycle. It must also promote the use of waste products to satisfy energy and material resource needs. The ecosystems, and the scales on which they would deliver the services, shall be mandated, at the Master Plan level, as the key building blocks for spatial analysis, planning and design, instead of unit area norms.

- (4.6) As a corollary to the above expectations, the Campus Master Plan shall need to propose a site development plan, with a long-term biodiversity and land health management plan, besides land zoning, land cover and land-use plan for massing the various functional areas. These include, but are not limited to, built spaces and their interconnections viz. Academic Zone, Residential Zone, Hostel Zone, Sports Zone, Health Facility, MEP Services, etc.
- (4.7) The Campus Master Plan shall be a comprehensive referral document for sustainable development and redevelopment of infrastructure and buildings as are required to fulfill the academic mission of the Institute. This plan must provide orientation, guidance and inspiration, to all stakeholders for all time to come.
- (4.8) The Campus Master Plan shall also need to propose an Infrastructure and Services Plan for transport systems including circulation and parking; ecological services including water, water harvesting systems, waste water and recycling, waste water agro-systems, drainage and conjoint surface and ground water management, solid waste management and recycling, soil conservation and improvement; climate control using passive and active systems; energy systems, waste to energy systems; intelligent building management and automation systems, and all necessary low voltage systems and networks that may be required for the development and functioning of such campus.
- (4.9) The Campus Master Plan shall need to propose a flexible/modular information and communication 'Smart Network' architecture which would facilitate adding more (or reallocating existing) resources. The Smart Network's primary goal shall be to deliver information to users, where and when it is needed. This information shall include voice, plain text, rich text, graphics and images, for the near future. In the long term, the network may exist as an extremely large scale network with diverse traffic characteristics connecting human users and non-human devices everywhere on the campus (home appliances, scientific devices, communications devices, wearable computers, small devices and autonomous devices) with other similar external domains over extremely large scale external networks. The network shall be designed to optimize the Total Value of Ownership (TVO). The network control systems shall also need to provide dynamic, real-time control of network resources to ensure maximum efficiency.
- (4.10) The Campus Master Plan must arrive at an urban form, density and development guidelines that reduce the adverse impacts of dependence on fossil fuels, and provides for photosynthetic spaces (as part of green infrastructure development) to expand renewable sources of energy. Further, the urban form must be suitable for humid subtropical climate and tropical wet and dry climate.

- (4.11) The Campus Master Plan shall have planning phases as per strength of future growth of students to 16000 Nos. and long term development horizon of 45-50 years. These shall include campus-level and zone-wise architectural, landscape and services guidelines; architectural and landscape design goals and strategic framework for development, sustainability, alternative energy, materials and finishes, site elements and site furniture, exterior lighting, signage & way-finding, engineering and allied services, real-estate future use policy and management procedures that strive to maintain the commitment to integrated sustainability throughout the process of design, development and operation.
- (4.12) The organization selected for preparing the Campus Master Plan will be responsible for obtaining all statutory approvals from the local / state / central authorities, if any.
- (4.13) The organization selected for preparing the Campus Master Plan on behalf of IITISM shall be responsible for steering the physical development at site and ensuring that the goals as outlined in the Campus Master Plan are achieved. This organization, or any of its related organizations/successors/legal heirs, or any of the subsidiaries, SHALL NOT be eligible for participating in the process of bids for architectural design of various buildings in the campus or other construction-related consultancy work of the campus in future.
- (4.14) **Conflict of Interest:** Persons or consultants who are involved in preparation of the EOI / RFP, short-listing and the evaluation process, will not be eligible to participate as applicant or as a proxy. Members of the expert committee and Jury shall also not have conflict of interest.

## SECTION 5

### SITE & ITS' ENVIRONS

(5.1) An area of 230 Acres, located in the middle of Dhanbad city along National Highway 32, already having built forms and services, serving a population of 12000 is available for revised planning and development as the Main Campus of IITISM.

(5.2) The land is in four parts (refer Figure 1) with the following bifurcation:

<b>Location</b>	<b>Area (Acres)</b>
IIT (ISM) Main Campus	218.0
Multipurpose Complex	2.1
150 Quarters	6.5
Lahbani	3.0
<b>Total</b>	<b>229.6</b>

*Note: For detailed topographical survey drawing, please refer Annexure 8.*

(5.3) IITISM has a number of reputed Educational Institutes and Organizations as its immediate neighbors at the site. The list is elaborated below for reference:

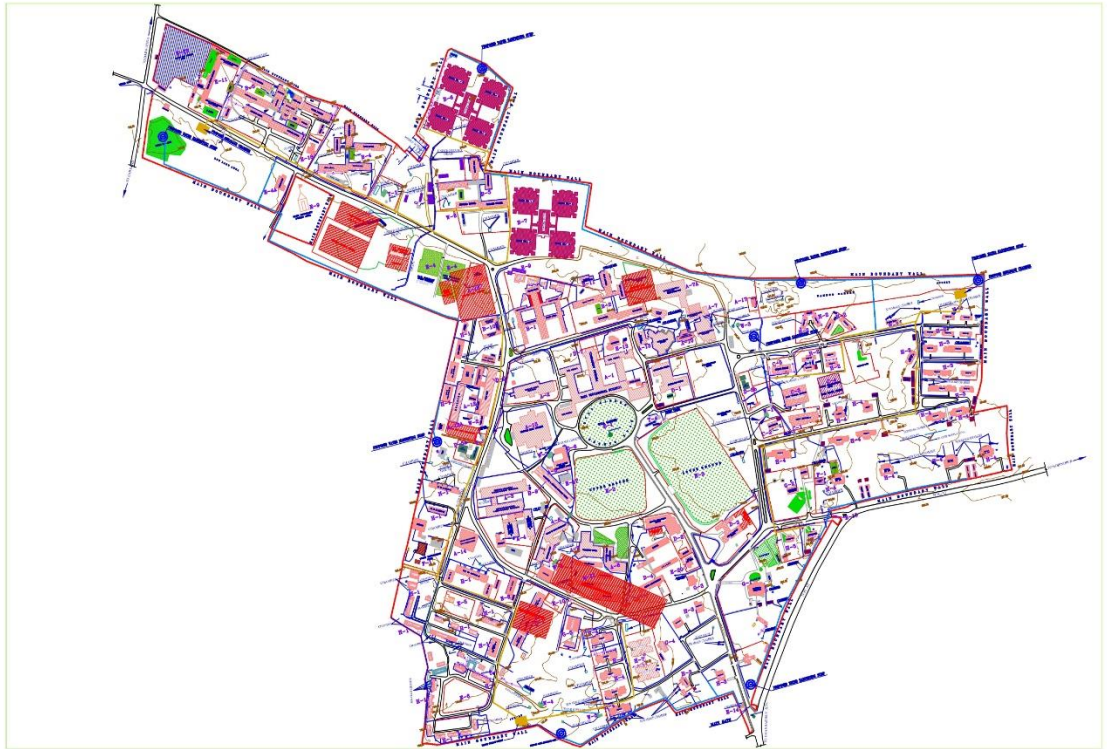
<b>S. No.</b>	<b>Institute/Organization</b>	<b>S. No.</b>	<b>Institute/Organization</b>
1	Central Institute of Mining and Fuel Research, Dhanbad	6	P.K Roy Memorial College
2	BIT, Sindri	7	Law College Dhanbad
3	SSLNT Women's College	8	Guru Nanak College
4	Patliputra Medical College and Hospital	9	Raja Shiv Prasad College, Jharia
5	KK College of Engineering and Management	10	B.S.S Mahila College

(5.4) Following are few pictures (Picture 1 to 6) of the site taken during different periods. More pictures of the site are available for download from the website of the Institute (refer Annexure 7).

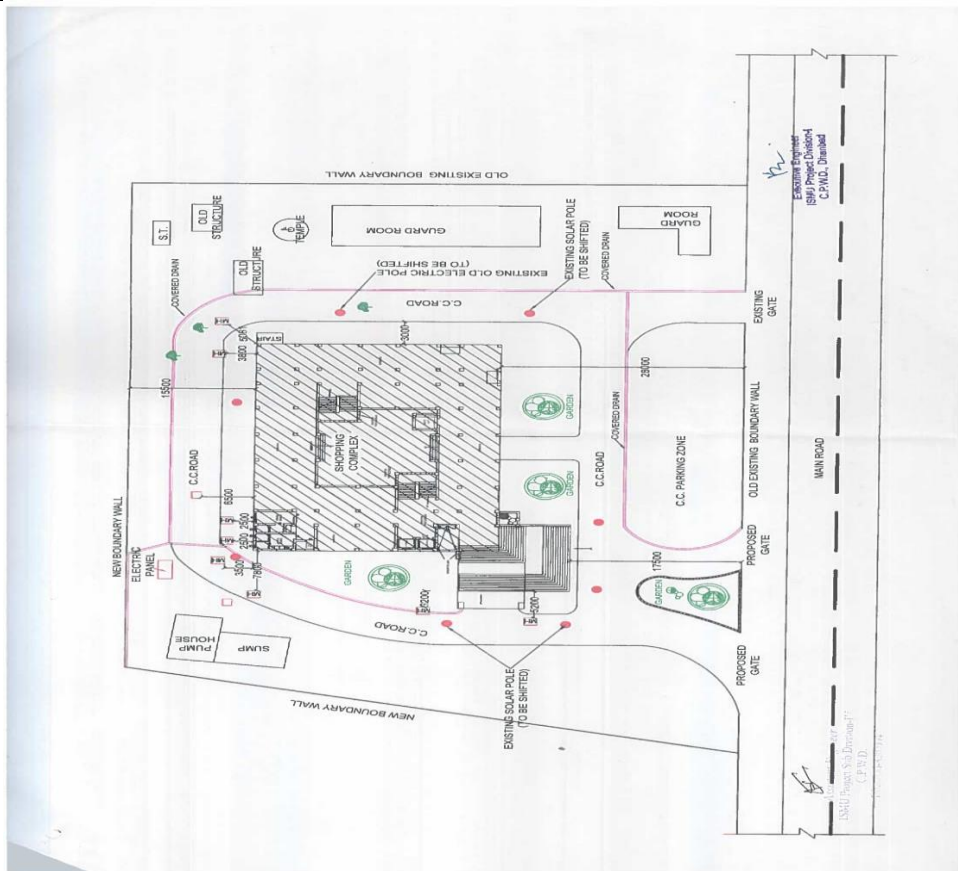


Main Gate	Penman Auditorium
	
Swimming Pool	Lower Ground
	
Jasper Hostel	Old Lecture Complex
	
New Academic Building	Rainwater Harvesting Pit





IIT(ISM) Campus



Multipurpose Complex



- (5.5.1) The main geomorphic features is Pediplain (PM): These are developed over granite gneiss and Meta sediments. High frequencies of lineaments are found.
- (5.5.2) The soils of the entire Dhanbad district are mostly of the residual type. High temperature and high rainfall have led to the formation of lateritic type of soils from rocks of Archean metamorphic complex exposed in the greater part of the district and also from the lower Gondwana rocks in the west-central and east central parts. Texturally the soils of the district have been classified into four classes:
- (a) Stony and gravelly soils: These are low-grade soils having a large admixture of cobbles, pebbles and gravels generally found at the base of the hills.
  - (b) Sandy soil: These types of soils are generally found near the river and streambeds. They contain more than 60 percent sand and poor in plant nutrients. They are also called hungry soils because of heavy manuring required.
  - (c) Loamy soils: They consist mostly detritus of decomposed rocks and vegetable matter and contain between 30 to 60 percent sand.
  - (d) Clayey soil: These soils are sticky when wet and very hard and difficult to break when dry. They are very fertile but yield in such soils improve with addition of sand, lime, coarse bulky manures etc.
- (5.5.3) Over all, the site for the proposed campus of IITISM is moderately rugged. Topography of the area is flat upland with a gentle slope and slight undulation at places in the form of small dunes and farm bunds. The south-western part is at lower elevation compared to the other parts.



- (5.5.4) Overall, the drainage pattern of the area is dendritic. Different types of drainage and stream orders govern the infiltration and runoff of water, especially along the course of the seasonal rivulets observed in proposed area.
- (5.6) Vegetation status:







	
Behind Admin Block	Shooting Area
	
Picture 3	Picture 4

Table: Vegetation species at site with local name

S. No.	Species	Common Name
	<i>Trees</i>	<i>Neem , Pakur, Sagwan</i>
	<i>Shrubs</i>	<i>Bougainvillea, Hibiscus</i>
	<i>Herbs</i>	<i>Herbs, Aloe vera, Lemon Grass</i>
	<i>Creeper / Climber</i>	<i>Allamanda, Wisteria, Wines</i>
	<i>Grasses</i>	<i>Cynodon, Carpet Grass</i>

(5.7) Climate:

(5.7.1) District

Dhanbad district of the Jharkhand state of India stretches between 23<sup>0</sup> 26'- 24<sup>0</sup> 01' North latitude and between 86<sup>0</sup> 10'- 86<sup>0</sup> 48' East longitude. This district is situated at a height of between 133-745 m above Mean Sea Level. The district comes between humid subtropical climate and tropical wet and dry.

(5.7.2) Temperature

Long-term data of temperature shows that temperature decreases progressively after October. The winter season starts from November and lasts till February. January is the coldest month with the mean daily maximum temperature at 30<sup>0</sup> C and the mean daily minimum temp. at 14.9<sup>0</sup> C.

Temperature: Mean Monthly Averages (°C)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Max	25.4	28.3	33.6	37.9	38.1	35.2	31.7	31.2	31.4	31.3	29.0	25.6
Min	10.5	13.0	17.6	21.9	23.4	23.9	23.2	23.0	22.5	19.6	15.1	10.8

(Source: India Meteorological Department; <http://www.imd.gov.in>)

(5.7.3) Rainfall

Dhanbad areas receive more rainfall due to coal dust, which attracts clouds and brings rainfall to the area. Rainfall is the principal method of ground water recharge to ground water. Southwest monsoon brings rainfall to this area during the months of June to October mainly. Normal data of the Dhanbad I.M.D. observatory indicates 1306 mm of rainfall.

Rainfall: Mean (mm)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mean R/F	12.2	16.9	17.0	17.5	46.0	195.0	323.1	308.6	263.7	86.6	8.4	5.5

(Source: India Meteorological Department; <http://www.imd.gov.in>)

(5.8) Regional flora & fauna

Flora: Sal, Jackfruit, Jamun, Kendu, Gambhar, Shisham, Mahua, Katha, Lac, Pesar, Mango, Aasan, Baheda, Bamboo etc

Fauna: Elephant, Bisons, Sambhar etc

(5.9) Mineral Resources

Coal, Iron Ore Haematite, Apatite Rock Phosphate, Cobalt etc

(5.10) Commerce

Mining, Utilities, Retails, IT, Cement etc

(5.11) Culture

Mix of different cultures and people. There is a significant percentage of people who are Bengalis, Biharis and Locals

(5.12) Architecture

The UPP Chutia Group of Tempe: Orissan Style

The Jhinjhini Pahadi Tempe: Curvilinear Sikhara Temple

Baba Kapileswar Dham: Slight Curvilinear Sikhra in Bengal Style

## SECTION 6

### SCOPE OF WORK, COMPLETION SCHEDULE & SCHEDULE OF FEES

- (6.1) Guidelines and requirements towards Campus Master Plan
- (6.1.1) **Strategies:** A meta list that can be analyzed in the first interactive workshop:
- (a) **Site restoration:** stabilizing the site, greening, controlling soil erosion.
  - (b) **Settlement morphology:** Dense and/or clustered urban settlement with expansions of each part vs. suburban campus
  - (c) **Social connection**
  - (d) **Building morphology**
  - (e) **Movement pattern:** Pedestrian-compatible and cycle dominant
  - (f) **Earth movement:** Minimum and balanced earth cutting and filling.
  - (g) **Conserving water:** Grey water recycled for flushing, then for cooling and irrigation, with a target of ~ 50 lpcd
  - (h) **Rain water:** Following traditional rain harvesting methods and blending them with modern water recycling technology, natural and artificial storage including setting up 'new' open/close storage structure.
  - (i) **Productive landscape:** With extensive as well as intensive ongoing urban agriculture, using advanced irrigation techniques, producing all possible forms of sustenance from the land including food, fuel, fodder, biodiversity, humus, habitat, and water.
  - (j) **Energy conservation:** Extreme conservation through passive and hybrid cooling strategies, daylight, and efficient artificial, with a target of 15 kWh/sqm.year
  - (k) **Energy production and storage:** Combination of Solar Thermal, Solar Photo Voltaic, and solar thermal for hot water, aim for 100% in 10 years, Gas tri-generation, grid-interactive, production of some fuel from STP or any other in-house source
  - (l) **Cooling and Heating:** Passive and hybrid cooling/heating, probably through courtyards, surface cooling/heating, building configuration to allow affordable district cooling/heating, thermal storage to reduce electrical storage demands, thermal insulation, double wall technology, building orientation, dense cluster development
  - (m) **Construction technology:** Meeting the code requirements of earthquake, fire risk, disaster, etc., even while respecting and developing local crafts and skills, stone as rubble, sandstone, sand-cement-fly ash, low steel roofs (vaults, domes, stone), mass insulation, light color, stone framed openings, embroidered tents, shaded by creepers, grass covered, vertical garden.
  - (n) **Learning spaces:** Empathetic, multi-media enabled, flexible
- (6.1.2) **International Benchmarking and Case studies** of other places

- (6.1.3) **Time:** The campus as an R&D project:
  - (a) Phase 1: *Integrated Strategic Campus Development Plan*
  - (b) Phase 2: *Implementation of development*
  - (c) Phase 3: *Monitoring, course correction, feedback, and research*
- (6.1.4) **Contents:** Broadly, the Integrated Strategic Campus Development Plan shall contain:
  - (a) Campus Master Plan
  - (b) Financing plan
  - (c) Phasing in and out
  - (d) Budget and Scope of Work for other service providers (PMC/CPWD, Architects, energy and water systems, facilities managers)
- (6.1.5) **Components of the Plan:** It will contain:
  - (a) Spatial, land cover and land-use plan
  - (b) Campus Master Plan for massing the built spaces and their interconnections
  - (c) Infrastructure and Services Plan for:
    - Mobility systems
    - Climate control using passive and active systems
    - Energy systems
    - Ecological services including water, waste water and recycling; drainage and conjoint surface and groundwater management (if required)
    - Solid waste management and recycling
    - Information and communication systems (ICT)
  - (d) Preliminary project report with a tentative capital and operating budget

(6.2) Brief Scope of Work

- (6.2.1) Understand the growth plan of the institute through relevant documents and meetings with stakeholders such as Administration, faculty, students, alumni, non-teaching staff and dependent residents of the campus.
- (6.2.2) Prepare a Campus Master Plan to accommodate this growth without compromising the existing facilities and services, so that they remain operational with minimal disruption always during the growth period.
- (6.2.3) Study the existing buildings and facilities and assess their potential for future use in view of growth plan.
- (6.2.4) Advise the Institute to augment/alter/demolish the structures to meet the incremental requirements of built-up area, in a phased program.
- (6.2.5) Advise the Institute regarding security in the research laboratories
- (6.2.6) Advise the Institute to dismantle redundant services, add new services or upgrade existing services with the latest technological advancements, commensurate with the phased program.

- (6.2.7) Propose the locations for future utility nodes such as underground water storage tanks, WTP, STP, electrical sub-stations, HVAC plants and any other allied services required by the institute along with alignments of their respective distribution/collection networks.
- (6.2.8) Prepare a comprehensive Traffic and transport management plan to ensure zero conflict in multi-modal movement across the network that is pedestrian and cyclist friendly.
- (6.2.9) Propose alignments and cross-sections of roads and paths for various categories of pedestrian and vehicular traffic, parking areas and entry/exit gate locations for universal accessibility to ensure a barrier-free and disabled (Divyang)-friendly campus.
- (6.2.10) Traffic and Transportation systems:
  - (a) All hierarchies of roads, streets, pathways, pavements, road dividers and movement corridors etc. for movement of people, goods and services.
  - (b) Campus level parking lots (open as well as covered), for different modes of transport. This will include underground, surface or multistoried parking lots
  - (c) Interface of the in-bound and out-bound campus traffic with the highway and other roads
  - (d) Universal access through the campus including definite design and construction proposals throughout the campus across all zones, in line with GOI regulations and India's international commitments.
- (6.2.11) Prepare an overall landscape strategy and landscape plans complementing the zonal plans, maintaining the existing flora and fauna to enhance and enrich the existing environment
- (6.2.12) Suggest judicious ways to build up the infrastructure for non-conventional and renewable sources of energy, increase self-sufficiency in energy and water, to develop a net-zero campus, expandable to a net-positive campus.
- (6.2.13) Prepare a Fire-fighting and disaster management plan
- (6.2.14) Prepare guidelines to create an urban identity and urban design of the campus, including desirable foot-prints and heights of future buildings, ground and sky connection typologies, open space hierarchy and morphology, visual axes and their integration with landscape and mobility networks, material and color palette, etc.
- (6.2.15) Signage
  - (a) The Design of indoor and outdoor way finding signage, location based signage, park signage and information signage to establish strong and uniform visual communication standards within IIT (ISM) Dhanbad campus.
  - (b) To suggest specifications of the material(s) to be used for fabrication.
  - (c) Details of fixing arrangement.



- (d) Locations for indoor signage in various buildings and outdoors for the entire campus.

(6.2.16) Branding and Identity

- (a) Phrasing the precise vision and mission of the Institute and a tag line within five to seven words, highlighting the international stature of the Institute.
- (b) Design the stationery items covering the followings, but not limited to: paper clips, pencil, pen, letterhead, envelopes, visiting cards, folders, files, erasers and sharpeners, rulers, scissors, diary, notepad, stamp, post-its, tape, paper bags, cloth bags, bookmarks, table organizer/pen stands, mouse pad, mugs, key rings, USB drives, ID cards, caps, t-shirts, track suites, convocation dress, mementos, etc.
- (c) Design of power-point presentation template.
- (d) Conceptualizing and design of brochures, magazines and newspaper advertisements, leaflets/fliers, banners, backdrops, hoardings, Kiosk designs, folders, invitation cards etc.

(6.2.17) Architectural Design Guidelines and MEP Design

For individual buildings and structures identified by the Institute in a phased manner, the firm shall provide comprehensive architectural services, which shall:

- (a) Respect all parameters provided for in the Campus Master Plan as the bases for architectural, structural and services developments,
- (b) Ensure safety, functionality, sustainability, aesthetics and economy,
- (c) Propose a typical Design Basis Reports for architecture, structure, MEP & other services, IT infrastructure (including communications, audio visuals, and smart classrooms), landscaping, transport, signage, horticulture, underground water storage tanks, WTP, STP, electrical sub-stations, HVAC plants and any other allied services, that compliant with the tenets laid down for the same in the Master Plan;
- (d) Provide architectural and structural design drawings, and
- (e) Engage with the Institute through the development and construction phase.

- (6.2.18) The consultant will undertake all activities necessary to fulfil the above stated objectives. Additionally, the consultant shall also assist the Institute in preparing i) the detailed estimate for execution of the work, and ii) the document with relevant terms and conditions necessary for tendering.

(6.3) Detailed Scope of Work

- (6.3.1) The scope of Services for the Consultant shall basically comprise of all actions and activities as are needed to meet the vision of the Institute as briefly outlined.

- (6.3.2) The CMP shall provide appropriate methods, designs, details, policies, guidelines, development models, systems and strategies for management of:
- (a) Campus level infrastructure including built mass for various zones, transportation system, ICT facilities, support facilities and utilities.
  - (b) Water use, segregation, treatment, reuse and recycling of various kinds of waters and water cycles including recharge of water, watersheds, subsurface aquifers and freshwater flow systems at site, including the liquid water/blue water flows (ground water and surface run-off) and the water vapour/green water flow (evapo-transpiration) hydrological cycles.
  - (c) Waste generated at site due to the various project-stage development and post-project campus activities including waste collection, segregation, recycling or utilization for waste-to-energy systems.
  - (d) Energy production through solar/biomass/waste-to-energy/other potentials at site, energy consumption models, systems and services including efficiency at all stages of production, transmission, consumption and recovery.
  - (e) Agriculture & agro-based vegetation and forestry systems, horticulture and floriculture in light of the eco-potential of the site including production, processing, storage, consumption and marketing of the produce.
  - (f) Ecology and biodiversity to achieve zero net loss and preferably a net gain of ecosystem services and biodiversity with respect to species composition, habitat structure, ecosystem functions and land use practices.
- (6.3.3) The Consultant shall design Financial Models for all the proposed services, including agricultural practices and agro-based functions keeping in mind the guidelines of the Government of India / Jharkhand state Government. The CMP shall propose feasible usage scenarios and consumption models for various services. Any proposed services and models shall be based on prevailing market assessment and validation findings for the region, specifically considering the Institute's inclination to invest in revenue-generating/revenue-neutral, self-sustaining services, which are to be benchmarked against both national and international quality and cost standards.
- (6.3.4) The CMP shall propose the most applicable Operating Models, for all the proposed services, including agricultural practices and agro-based functions in IITISM, that factors in all the integration elements between the various campus infrastructure and systems and the provisioning of the proposed eco-services.

- (6.3.5) The CMP shall provide designs, policies, guidelines and all details as may be required for the development of the campus through reports, drawings, models, sketches etc. at suitable scale and medium.
- (6.3.6) All documents, drawings, reports shall be submitted in hard as well as soft copies (editable and non-editable), in the formats and scale as directed from time to time by the Institute or its authorized representative.
- (6.3.7) The CMP shall be prepared strictly as per statutory provisions and guidelines issued by the Central / State Government, and also in accordance with the best international practices and codes as applicable to such development.
- (6.3.8) The Consultant shall provide, without question or fail, all information within the purview of the CMP as sought by all committees and other agencies appointed by the Institute for any purpose. Support and assistance, if any, to the extent required by such committees and other agencies, shall also be provided by the Consultant as and when desired by the Institute.
- (6.3.9) The Consultant shall provide knowledge transfer and handover of all aspects of each CMP component to the selected implementing & management agencies.
- (6.3.10) The Consultant shall provide a complete Project Management Plan in the desired format, for all the initiatives and milestones in the CMP.
- (6.3.11) The Consultant shall maintain a organizational/ governance structure, to the satisfaction of the Institute, in order to ensure effective monitoring of stated milestones and initiatives of the CMP.
- (6.3.12) The Institute will provide to the Consultant, free of cost, a skeletal bare shell office space of up to a maximum of 50 m<sup>2</sup> for establishing an office in the campus, for a maximum period of five years, or the extended period beyond 5 years (if required), or as decided by the Institute.
- (6.3.13) The Consultant may, at the Institute's discretion, aid and advise in the matter relating to the CMP, as and when required.
- (6.3.14) The Consultant shall be required to participate in the meetings as and when required by the Institute.
- (6.3.15) The status/ designation/ qualifications of the representative(s) of the Consultant who will be allowed to deal/ interact with the Institute and/ or its representatives and designated committees/ groups etc. shall be the matter of discretion of the Institute, and the decision of the Institute in this regard shall be final and binding on the Consultant.
- (6.3.16) All Intellectual Property Rights of the schemes and proposals submitted as a part of the process of CMP design, development, implementation and monitoring shall rest with IITISM.
- (6.3.17) Traffic and Transportation Systems:

- (a) All hierarchy of roads, streets, pathways, pavements, road dividers and movement corridors, underpass, over-bridges, tunnels, etc., for movement of people, goods and services.
- (b) Transportation terminals, stops, ticketing counters and all related buildings and structures.
- (c) Campus level parking lots (open as well as covered), for different modes of transport. This will include underground, surface or multi-storied parking lots.
- (d) Interface of the in-bound and out-bound campus traffic with the NH32
- (e) Universal access/barrier-free access throughout the campus including definite design and construction proposals throughout the campus across all zones, in line with GOI regulations and India's international commitments.

(6.3.18) Services and Utilities Systems:

- (a) Storm water drainage systems
- (b) Water harvesting systems for the whole campus and peripheral collection zones outside the campus, including surface and underground drainage systems, rain water harvesting, underground aquifer recharge.
- (c) Electrical systems for street lights, open-areas etc.; renewable energy generation and supply systems
- (d) Campus networking systems including ICT
- (e) Integrated building services and campus infrastructure & services management systems including need-based automation, duty cycling, O&M cycling, manpower and other resource planning & management etc.
- (f) Waste Management systems including, collection depots, transfer stations, disposal grounds, vermi-composting and other disposal / recycling mechanisms (excluding designs of plant and equipment and technological systems and other specialized designs).
- (g) Water supply, water use, water segregation, treatment, reuse and recycling, sanitary, sewerage and drainage systems for the campus (excluding design of overhead tanks, surface or underground reservoirs, plant and equipment).
- (h) Towers, tunnels, channels, ducts, carriageways, corridors, reservoirs, tanks etc. (underground, surface or above ground) for all service lines like water supply and sewage systems, electricity, telephone, information network, fire detection & fighting systems etc., including those for which detailed engineering designs are being provided by other specialized agencies, as the case may be.

(6.3.19) Landscape:

- (a) Landscape details of campus level greens including, plantation, vegetation, woodlands, piazzas, public squares, hierarchy of parks and formal greens etc. (excluding detailed internal and external landscaping adjacent to buildings and within plots carved out for different functional uses like lecture halls, laboratory complexes, offices, shopping centers, hostels, individual houses and apartments etc.)
- (b) All measures related to ecological restoration, de-desertification, bio-remediation etc.
- (c) Campus level signage systems, directional boards, way-finding systems etc.
- (d) All street furniture like benches, posts, emergency phone booths etc.
- (e) External and internal boundary wall, barriers, including entrance gates, security rooms etc.

(6.3.20) Agriculture:

- (a) Long-term integrated farming operations program including agriculture, floriculture, horticulture and other agro-forestry systems
- (b) Organic, sustainable agriculture schemes that have the capacity to supply food for campus consumption.
- (c) Integrated farming operations that include waste treatment and bio-waste consumption for agricultural needs.
- (d) Farms Layouts, bio-fertilizers production and irrigation systems details.
- (e) Access routes, barriers, security posts, research labs, green houses etc.

(6.3.21) Information and Communications Technology (ICT) Plan: Business Analysis and Services Design:

- (a) Review all relevant ICT infrastructure provisions for their possible application at IITISM campus; provide benchmarked analysis against cities and similar campus developments (in the world) with strong technological and ecological fusion elements (preferred). Analysis shall ensure baseline alignment with relevant ICT standards, both nationally and regionally.
- (b) The Consultant shall: Identify key business requirements from IIT and key stakeholders based on existing campus master planning provisions, faculties and centers of excellences and demographics and Propose, and qualify, a Services Catalogue for students, faculty, management and operational staff.

(6.3.22) Campus Network Design

- (a) Prepare High-Level Design (HLD) documents for all converged ICT components consisting of campus-wide (outside plant passive and

active networking infrastructure) and In-building (passive and active networking Infrastructure) designs.

- (b) Provide reference ICT architectures and recommended ICT design guidelines to ensure compliance with the overall IITISM vision.
- (c) As stated, the Consultant shall take into account all elements of sustainability in the campus network design, from demand-side energy management guidelines in all buildings within the campus to recommending smart micro-grid initiatives to complement any existing planning provisions for on-site energy generation, transmission and distribution.
- (d) Design an IOC with a Common Operating Picture (COP) for IITISM for enhanced campus operations and collaboration among the different campus operational departments as well as regional public departments such as public safety, transportation, utilities management and any other applicable command centers.

(6.4) Major Milestones towards Campus Master Plan

(6.4.1) Design Stage

- (a) Space Management Program.
- (b) Phasing Plan: of the various buildings, facilities and infrastructure of the campus, including specifying plots for development of various generic buildings of a repetitive nature.
- (c) Documentation for appointment of architects and other Consultants (EOI, RFP and other documents) to allow IITISM to appoint architects and other Consultants, etc.
- (d) Land-use zoning: indicating allocation for the Institute's functional areas – academic, research, residential, administrative and community amenities and support buildings; transport and parking systems, services and utilities; formal green zones, agricultural, horticulture, floriculture fields, campus woodlands, playing fields; water management systems, solar park and Science Centre as required for development of a world class eco-campus.
- (e) Urban Design, Development Guidelines and Passive and Active Design Strategies for "Sustainable Architecture".
- (f) Traffic and Transportation Plan of the campus, including different hierarchies of roads, tracks for cycles and 'green vehicles', pedestrian pathways, parking systems, public transportation systems, etc.
- (g) Services and Utilities Plan giving capacity, layout and technology for various utilities and services, campus network and other ICT infrastructure, in different phases of development including provisions for future development and expansion and guidelines to

ensure that expansion takes place without disruption to infrastructure.

- (h) Landscape Plan.
- (i) Agriculture Plan.
- (j) Energy Management Plan giving policy framework and guidelines for effective and efficient energy production, transmission, consumption and recovery in the Campus including, but not restricted to, conservation by building and lifestyle methods, smart grid within campus, and renewable energy generation through solar/biomass/waste-to-energy/other potentials at site.
- (k) Waste Management Plan giving details of collection, transportation, treatment and disposal systems including recycling and reuse. This will include solid and liquid waste. The Plan will also suggest technologies and measures to deal with hazardous, toxic and e-waste, besides waste from laboratories, offices, households, hostels, dining hall and kitchen, gardens and agro-farms, and other areas of the campus. Human solid waste can be treated via natural systems. The plan may suggest various bio-digestors and/or other systems that will serve the campus'long-term waste management needs. An integrated waste treatment system will serve educational, research, and outreach objectives, and form a part of the overall resource management system for the campus.
- (l) Water Management Plan for the whole campus and peripheral collection zones outside the campus, including surface and underground drainage systems, rain water harvesting, underground aquifer recharge, water use, segregation, treatment, reuse and recycling of various kinds of waters and water cycles etc. (much of this development may be non-engineered, for example, through natural systems of drainage and water management.)
- (m) ICT Plan giving details of High Speed Campus LAN (wired and wireless), Unified Communication system for providing VoIP, IP TV and IP based Video Conferencing, Security and Access Control system, Surveillance system and Smart Building Management system. The complete monitoring of the ICT enabled services will be done from an Integrated Operations Centre (IOC). The Master Plan should detail the designated service corridors for external OFC and Cable routes and building entry/exit points. It should also detail the requirements for the Central Computer Centre which will house Application servers, HPC and Cloud Computing, IOC and support systems such as UPC, Precision Air Conditioning and DG set for power backup.

- (n) Financial Models for all the proposed services and agro-based functions keeping in mind any key regulatory provisions and incentives of the Government of India / Jharkhand State Government to ensure that the proposed services identified are economically viable.
- (o) Operating Models for all the proposed services and agro-based functions of IITISM, that factor in all the integration elements between the various campus infrastructure and systems and the provisioning of the proposed eco-services.

(6.4.2) Approval Stage

- (a) After the CMP is approved by the Institute, the Consultant shall obtain all statutory approvals, as may be required during development from the Government of India / Jharkhand State Government / local authorities and all such agencies as applicable.
- (b) The Consultant shall prepare and submit all drawings, reports and other details, to the local bodies and other authorities, as required for obtaining statutory approvals, etc.
- (c) The Consultant shall also make revisions, corrections and modifications, provide all requisite information, make presentations, attend meetings for approvals and undertake all liaisons and all associated requisite follow-up for timely clearances and approvals from the concerned authorities.
- (d) The Institute shall provide necessary authority/power of attorney etc., if and when required, to the Consultant; and provide signatures and seal of the Institute on the documents to be submitted to the statutory authorities by the Consultant.
- (e) All fees/charges relating to statutory approvals, payable to local bodies and other authorities, shall be paid by the Consultant and subsequently the same shall be reimbursed by the Institute upon production of proof of actual payment. In case, the local authorities demand payment directly from the Institute, it shall be the duty of the Consultant to bring it to the notice of the Institute for doing the needful.

(6.4.3) Implementation Stage

- (a) The Consultant shall update the proposed financial models and operating models for different campus services and functions, according to the final services and systems proposals approved for various components of the CMP.



- (b) The Consultant shall review and provide the necessary input on tender packages and documentation previously provided for all components.
- (c) The Consultant shall provide implementation support for the overall plan which would include but not be limited to the following:
  - Finalization of tender packages and preparation of RFP document(s) for selection of the Consultants/architects for construction as per the suggested tender packages, including providing expertise to the Institute in the process for the selection of the Consultants/architects for various packages.
  - Preparation of detailed design drawings, specifications, preliminary and detailed estimates and tender documents for all the external/peripheral services and infrastructure works (including their related buildings/structures), including providing expertise to the Institute in the process for the selection of Contractors for execution of various packages.
- (d) Apart from the scope of Services as outlined above, the Consultant's role would also include but not be limited to preparing all engineering designs, technical drawings, preliminary and detailed estimates and all related aid and advice as required, for the following:

(6.4.4) Monitoring and Evaluation Stage

- (a) Supervision of all the CMP level developmental works, including periodic site inspections by qualified and experienced professionals, to the extent desired by the Institute.
- (b) Advising, participating in meetings, and giving design and other briefs to the architects and others, as and when required by the Institute, so as to ensure that developmental regulations, guidelines and other proposals of the CMP are incorporated at the building level.
- (c) Developing and installing systems for supervision, performance monitoring and evaluation of the CMP proposals, and overseeing the campus development, to the extent desired by the Institute, for at least up to five years from the date of approval of the CMP.
- (d) Providing designs, details, specifications, estimates and related support for establishment of various labs, plant and equipment required for such monitoring and evaluation.
- (e) The Consultant shall, whenever sought by the Institute, provide all necessary information to the Institute, or to any third party/agency appointed by the Institute, to monitor performance.

- (f) The Consultant shall ensure proper implementation, performance monitoring and evaluation of the CMP proposals. For this purpose, the Consultant shall establish an office at site and/or temporary campus of the Institute for at least five years from the date of approval of the CMP. The Consultant shall depute, to this office, competent, qualified and experienced (minimum five years) professional staff led by a competent, qualified and experienced (minimum fifteen years) professional. Besides the regular visits by staff posted at Jodhpur, periodic site inspection shall be done by qualified and experienced (minimum ten years) professionals from different disciplines, as and when directed by the Institute. After this initial period of five years, the Consultant's periodic presence may be required for spot surveys, and other studies, to monitor performance and provide support to different agencies, as and when directed by the Institute.
- (g) The Consultant shall not have the right to refusal for offering such Services as and when directed by the Institute.

(6.5) Campus Master Plan: Design document

- (6.5.1) Project Site
- (6.5.2) Master Plan Objectives
- (6.5.3) Site Features
- (6.5.4) Topographical Survey
- (6.5.5) Campus Master Plan
- (6.5.6) Campus Master Plan: Phasing
- (6.5.7) Campus Master Plan: Area calculation and chart
- (6.5.8) Special Features
- (6.5.9) Space Planning
- (6.5.10) Area Program (All Phases)
- (6.5.11) Area Program (Phase 1 and Phase 2)
- (6.5.12) Phases with details
- (6.5.13) Land Use Concept
- (6.5.14) Land Use Zoning
- (6.5.15) Land Use Functioning
- (6.5.16) Urban Design Guidelines
- (6.5.17) Academic Zone buildings
- (6.5.18) Residential Zone buildings
- (6.5.19) Other ancillary buildings
- (6.5.20) Development works
- (6.5.21) Services
- (6.5.22) Technical Guidelines with date and Design Basis Report (DBR)
- (6.5.23) Traffic and Transport Plan

- (6.5.24) Services and Utilities
- (6.5.25) Landscape
- (6.5.26) Operation and Maintenance Model
- (6.5.27) Financial Model
- (6.5.28) Statutory Approvals
- (6.5.29) GRIHA Rating
- (6.5.30) International and National Technical-Design competitions

(6.6) Completion Schedule

<i>Stages</i>	<i>Activities</i>	<i>Deliverables</i>	<i>Milestone (Weeks from start of work)</i>
Stage 1	Survey of Main Campus	(1) Survey report (2) Actual plan (3) Contour map (4) Campus plan	01 02 02 03
Stage 2	Campus Master Plan	(1) Normal plan (2) Rendered plan (3) Design document (4) Urban Design Guidelines	03 04 05 06
Stage 3	RFP for Architect	(1) RFP Document	06
Stage 4	Design Basis Reports	(1) Architectural DBR (2) MEP DBR (3) Structural DBR	10 10 10
Stage 5	Planning, Design and Analysis	(1) Concept plan (2) Final plan (3) Design and Analysis	08 12 16
Stage 6	Estimates	(1) Preliminary Estimate (2) Detailed Estimate	20 24
Stage 7	Drawings	(1) Approval drawings (2) GFC drawings	20 24
Stage 8	Statutory Approvals	(1) Preparation of submission application and document (2) Submission of application and document (3) Submission of fee (4) Document of Approval	30   32  34 36

(6.7) Schedule of Fee

(6.7.1) The total fees payable (Phase wise) to Consultant Campus Master Plan in accordance with the Completion Schedule (6.6) and stages is given below:

<i>S. No.</i>	<i>Stage</i>	<i>Description</i>	<i>Cumulative Payment Schedule</i>
1	Stage 0	Advance (On submission of Bank Guarantee)	10% of Award Value
2	Stage 1	Survey of Main Campus	25% of Award Value - (Stage 0)
3	Stage 2	Campus Master Plan	40% of Award Value - (Stage 0 + Stage 1)
4	Stage 3	On award of work Architect	50% of Award Value - (Stage 0 + Stage 1 + Stage 2)
5	Stage 4	Design Basis Reports	60% of Award Value - (Stage 1 + Stage 1 + Stage 2 + Stage 3)
6	Stage 5	Planning, Design and Analysis	70% of Award Value - (Stage 0 + Stage 1 + Stage 2 + Stage 3 + Stage 4)
7	Stage 6	Estimates	80% of Award Value - (Stage 0 + Stage 1 + Stage 2 + Stage 3 + Stage 4 + Stage 5)
8	Stage 7	Drawings	85% of Award Value - (Stage 0 + Stage 1 + Stage 2 + Stage 3 + Stage 4 + Stage 5 + Stage 6)
9	Stage 8	Statutory Approvals	90% of Award Value - (Stage 0 + Stage 1 + Stage 2 + Stage 3 + Stage 4 + Stage 5 + Stage 6 + Stage 7)
10	Stage 9	On award of work to Contractor	95% of Award Value - (Stage 0 + Stage 1 + Stage 2 + Stage 3 + Stage 4 + Stage 5 + Stage 6 + Stage 7 + Stage 8)
11	Stage 10	On completion of work by the Contractor	100% of Award Value - (Stage 0 + Stage 1 + Stage 2 + Stage 3 + Stage 4 +

			Stage 5 + Stage 6 + Stage 7 + Stage 8 + Stage 9)
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- (6.7.2) The payment shall be raised and paid only after holistic completion of each stages and as per the certification of the Engineer-In-Charge.
- (6.7.3) The fees shall be inclusive of all expenses (both direct and indirect) relating to the performance of the Contract for the entire period of Contract excluding service tax and cess thereon, if any, which shall be payable extra as applicable as reimbursement.
- (6.7.4) Consultant Campus Master Plan shall not be entitled to any payment or remuneration, over and above the fees hereinbefore stipulated, on account of any delay caused by any reason, whatsoever.
- (6.7.5) Deductions on account of Income tax and other statutory provisions shall be made by IIT (ISM) Dhanbad, upon payment of fees or any other payments whatsoever to Consultant Campus Master Plan as per prevalent rules / provisions.
- (6.7.6) The stage wise fees as prescribed in para 5.1, shall be payable within 30 days of completion of the specified component of the work to the entire satisfaction of the Institute and in accordance with the terms of Contract and the Scope of Services as enunciated in this document.
- (6.7.7) The Bank Guarantee required for advance if any (as agreed by the institute) shall be obtained from any scheduled bank and shall be valid up to one year from date of issue. In case the next stage milestone is extended by the Institute, Consultant Campus Master Plan shall get the validity of Bank Guarantee extended to cover such enlarged time for completion of work up to the next stage of payment. After the payment of next stage of fees with adjustment for advance by the Institute, the bank guarantee shall be returned to Consultant Campus Master Plan, without any interest.
- (6.7.8) Out of pocket expenses: No out of pocket expenses shall be admissible. For short stay of professionals/staff of Consultant Campus Master Plan visiting IIT (ISM) Dhanbad in connection with the performance of the Contract. Room rents and board, as applicable to outside visitors/faculty on Institute work, shall be payable by Consultant Campus Master Plan in such a case. Similarly, all travel and touring, international, domestic, local, to site or for meetings, etc. by any means of transport are all deemed to be included in the fee and shall accordingly be borne by Consultant Campus Master Plan and their representatives directly.

- (6.7.9) All payments made by the Institute to the Applicant for any purpose whatsoever shall be in Indian Rupees only. Compliance with the foreign exchange regulation of India or any other country shall be the sole responsibility of the Applicant; and IIT (ISM) Dhanbad shall in no way be involved directly or indirectly.

## SECTION 7

### TERMS & GENERAL CONDITIONS

#### (7.1) General Provisions

- (7.1.1) **Contract:** The contract to be executed between the successful applicant and the Institute and the documents as mentioned at (a) to (d) hereunder, shall collectively be referred to as the “Contract”. The successful applicant, on acceptance of their offer by the Institute, shall, within fifteen (15) days from the issue of the Letter of Intent, execute the Contract. The documents as mentioned below shall be treated as forming part of the Contract, in order of preference in case of inconsistencies:
- (a) The RFP document and Submissions made by the applicant, that is, Technical Proposals and Financial Proposals.
  - (b) All correspondence made between the applicant and the Institute from RFP stage up to and including the Letter of Acceptance towards the offer.
  - (c) All directions and instructions issued to Consultant Campus Master Plan from time to time by the Committee constituted by the Institute throughout the entire duration of the Contract.
- (7.1.2) **Relation between the Parties:** Nothing contained herein shall be construed as establishing a relation of master and servant or of the Principal and Agent as between the Institute and Consultant Campus Master Plan or their personnel or employees or agents or any person(s) appointed or engaged by Consultant Campus Master Plan. Consultant Campus Master Plan, subject to this Contract, shall have complete charge of the personnel or employees or agents or any person(s) appointed or engaged by the Consultant, performing the Services and shall be solely responsible for any and all acts undertaken or the Services performed by them on behalf of Consultant Campus Master Plan.
- (7.1.3) **Law Governing the Contract:** This Contract, its meaning and interpretation, and the relation between the Parties shall be governed by the laws applicable in India.
- (7.1.4) **Language:** This Contract has been executed in English language, which shall be the binding and controlling language for all matters relating to the meaning or interpretation of this Contract.
- (7.1.5) **Heading:** The headings shall not limit, alter or affect the meaning and interpretation of this Contract.
- (7.1.6) **Notices:**
- (a) Any notice, request or consent required or permitted to be given or made pursuant to this Contract shall be in writing. Any such notice, request or consent shall be deemed to have been given or made when delivered in person to an authorized representative of the Party to

whom the communication is addressed, or when sent by registered post acknowledgement due, email, telex, telegram or facsimile to such Party at the last known address of the addressee party/person.

- (b) A party may change its address for notice hereunder by giving the other Party notice of such change.

**(7.2) Commencement, Completion, Modification and Termination of Contract**

**(7.2.1) Effectiveness of Contract:** This Contract shall come into force and effect on the date of execution of the Contract by the successful applicant as required under para 1.1 subject to Consultant Campus Master Plan furnishing the Performance Guarantee as laid down in para 2.2 below.

**(7.2.2) Security Deposit (SD):**

- (a) A sum @ 4% of the Gross Amount of the bill shall be deducted from each running bill of Consultant Campus Master Plan. The same shall be retained till completion of the work and this shall be returned year wise within the Defect Liability Period of 03 (Three) years i.e. 1st year: 50% of total SD; 2nd Year: 25% of total SD; and 3rd Year: 25% of total SD vide Stage 6, Stage 7 and Stage 8 as per the Schedule of Fee.
- (b) No partial refund of Security Deposit shall be made during Defect Liability Period. In case the final bill is not settled within stipulated period for reasons beyond control and the Institute is satisfied that the Security Deposit is not required for adjustment of the Institute's dues or whatsoever dues either in this or any other contract then this Security Deposit either in full or in part could be refunded at the sole discretion of the Institute.
- (c) In case of termination of contract, this Security Deposit shall be forfeited and amount necessary to make up this amount shall be recovered from money due to Consultant Campus Master Plan under this contract, or any other contract with the Institute.

**(7.2.3) Performance Guarantee (PG):**

- (a) Consultant Campus Master Plan shall initially submit an irrevocable Performance Guarantee of Rs. 15 Lakhs only as the case may be, in addition to any other deposits required to be made under the Contract for his proper performance of the Contract, notwithstanding and/or without prejudice to any other provisions of the Contract, on or before the execution of the Contract. 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 or Government Securities or Fixed Deposit Receipts or Guarantee Bonds of any Scheduled Bank or the State Bank of India in accordance with the prescribed form.



- (b) This Performance Guarantee shall be in the form of Bank Guarantee of any scheduled bank in accordance with the proforma prescribed by the Institute.
  - (c) Consultant Campus Master Plan will not be allowed to start the work unless the Performance Security / Guarantee is submitted by him/her
  - (d) The Performance Guarantee shall be initially valid upto the stipulated date of completion plus sixty (60) days beyond that. In case the time for completion of work gets enlarged, Consultant Campus Master Plan shall get the validity of Performance Guarantee extended to cover such enlarged time for completion of work, before the expiry of the Performance Guarantee. After recording of the completion certificate for the work by the Institute, the Performance Guarantee shall be returned to Consultant Campus Master Plan, without any interest.
  - (e) The Institute shall not make a claim under the Performance Guarantee except for amounts to which the Institute is entitled under the Contract (not withstanding and/or without prejudice to any other provisions in the Contract agreement) in the event of:  
Failure by Consultant Campus Master Plan to extend the validity of the Performance Guarantee as described herein above, in which event the Institute may claim the full amount of the Performance Guarantee.
- (7.2.4) **Commencement of Services:** Consultant Campus Master Plan shall begin carrying out the Services at the end of such time period after the Effective Date as shall be specified in the letter of acceptance of offer.
- (7.2.5) **Termination of the Contract in the event of non-commencement:** If Consultant Campus Master Plan for any reason, other than Force Majeure, is unable to start the work within one month of the date of Commencement of Services as mentioned in para 2.3, the Institute may, by a written notice of not less than four (4) weeks to the other party, referred to as "Notice Period", declare the Contract as null and void, if the work is not commenced on or before the expiry of the Notice Period. Neither party shall have any claim against the other party in case the work is not commenced on or before the expiry of the Notice Period and the Contract is declared null and void , except that:
- (a) The advance, if any, paid to Consultant Campus Master Plan shall be returned to the Institute within fifteen (15) days of the expiry of the Notice Period, failing which the Bank Guarantee submitted by Consultant Campus Master Plan for the same shall be encashed by the Institute
  - (b) The Performance Guarantee shall be encashed by the Institute for Ten (10) percent of the amount
- (7.2.6) **Expiration of Contract:** Unless terminated pursuant to provisions of the Contract, the Contract shall expire when Services have been completed as

per specified scope of Services to the satisfaction of the Institute or the agreed/specified Contract period including extended period, if any, is over, whichever is earlier.

(7.2.7) **Modification:** If at any time after the award of work, the Institute decides to enlarge or reduce the scope of Services for any reason and hence require the Services to be performed in accordance with the enlarged or reduced scope, the Institute shall give notice in writing to that effect to Consultant Campus Master Plan and Consultant Campus Master Plan shall act accordingly in the matter. In the event of reduction in the scope of Services, Consultant Campus Master Plan shall have no claim to any payment of compensation or otherwise, on account of any profit or advantage which could be derived from the rendering of the Services in full but which cannot be derived in consequence of the reduction in the scope of Services.

(7.2.8) **Force Majeure**

(a) Definition

- For the purposes of this Contract, “Force Majeure” means an event which is beyond the reasonable control of a Party, and which makes a Party’s performance of its obligations hereunder impossible or so impractical as reasonably to be considered impossible in the circumstances, and includes, but is not limited to, war, riots, civil disorder, earthquake, fire, explosion, storm, flood or other adverse weather conditions, strikes, lockouts or other industrial action (except where such strikes, lockouts or other industrial action are within the power of the Party invoking Force Majeure to prevent), confiscation or any other action by Government agencies.
- Force Majeure shall not include (i) any event which is caused by the negligence or intentional action of a Party or such Party’s Sub Consultants or agents or employees, nor (ii) any event which a diligent Party could reasonably have been expected to both (A) take into account at the time of the conclusion of the Contract and (B) avoid or overcome in the carrying out of its obligations hereunder.
- Force Majeure shall not include insufficiency of funds or personnel or failure to make any payment required hereunder.

(b) Failure to perform due to Force Majeure Not a Breach of Contract: The failure of Consultant Campus Master Plan to perform due to Force Majeure shall not be considered to be a breach of, or default under the Contract, provided that in the opinion of the Institute which shall be final and binding, such an inability arises directly from an event of Force Majeure, and provided further that Consultant Campus Master Plan has taken, to the entire satisfaction of the Institute, all reasonable

precautions, due care and alternative measures, all with the objective of carrying out the work as per the terms and conditions of this Contract.

- (c) Measures to be Taken
  - In the event of Force Majeure, Consultant Campus Master Plan shall take all reasonable measures to minimize its inability to fulfill its obligations under the Contract with a minimum of delay.
  - In the event of Force Majeure, Consultant Campus Master Plan shall notify the Institute of such event as soon as possible, and in any case not later than fifteen (15) days following the occurrence of such event, providing evidence of the nature and cause of such event, and shall similarly give notice of the restoration of normal conditions as soon as possible.
  - Consultant Campus Master Plan shall take all reasonable measures to minimize the consequences of any event of Force Majeure.
- (d) Extension of Time: The time period within which Consultant Campus Master Plan, pursuant to this Contract, is required to complete any action or task, but could not complete the same due to Force Majeure shall be considered by the Institute for Extension of Time, taking in to account the net effect of the event of Force Majeure and the measures taken by Consultant Campus Master Plan pursuant to para 2.7, if any, on the said time period.
- (e) Consultation: Not later than thirty (30) days after Consultant Campus Master Plan, as the result of an event of Force Majeure, have become unable to perform a material portion of the Services or in case the Institute is not able to perform any of its obligations for similar reason, the Parties shall consult each other with a view to agreeing on appropriate measures to be taken in the circumstances.

**(7.2.9) Termination of the Contract**

- (a) The Institute, on occurrence of any of the events specified in paragraphs (a) through (e) of this para 8.2.9, may, by not less than thirty (30) days' written notice to Consultant Campus Master Plan, , terminate this Contract:
  - if Consultant Campus Master Plan fails to remedy a failure in the performance of their obligations , as specified in the notice given by the Institute, within fifteen (15) days of receipt of such notice or within such further period as the Institute may have subsequently approved in writing;

- if Consultant Campus Master Plan becomes (or, if Consultant Campus Master Plan consists of more than one entity, if any of their Members becomes) insolvent or bankrupt or enter into any agreements with their creditors for relief of debt or take advantage of any law for the benefit of debtors or go into liquidation or receivership whether compulsorily or voluntarily;
  - if Consultant Campus Master Plan fails to comply with any final decision reached as a result of proceedings pursuant to Clause 3 hereof, within thirty (30) days of receipt of the said final decision;
  - if Consultant Campus Master Plan submits to the Institute a statement or notice which has a material effect on the rights, obligations or interests of the Institute and which Consultant Campus Master Plan knew to be false;
  - if after removal of the Force Majeure event, Consultant Campus Master Plan is unable to resume the work and perform a material portion of the Services during a period of not more than sixty (60) days after the date of removal of Force Majeure event;
  - if Consultant Campus Master Plan suspends his activities for reasons which, in the opinion of the Institute, are not genuine and bonafide.
  - if Consultant Campus Master Plan including any of its subsidiary or personnel is found to have committed or is involved in any act or have failed to act and such action or inaction has a material adverse effect on the rights and interests of the Institute;
  - if any statement, declaration or information or details submitted by Consultant Campus Master Plan during the course of this Contract is found to be misleading, false or vexatious;
  - if Consultant Campus Master Plan including any of its subsidiary or personnel is found to be in violation of any of the terms and condition of this contract;
  - if the Institute, in its sole discretion and for any reason whatsoever, decides to terminate this Contract.
- (b) Cessation of Rights and Obligations: Upon termination of this Contract pursuant to para 8.2.9 hereof, or upon expiration of this Contract pursuant to Clause 8.2.6 hereof, all rights and obligations of the Parties hereunder shall cease, except such rights and obligations as may have accrued on the date of termination or expiration.
- (c) Cessation of Services: Upon termination of this Contract by notice pursuant to para 8.2.9 hereof, Consultant Campus Master Plan shall, immediately upon dispatch or receipt of such notice, take all necessary steps to bring the Services to a close in a prompt and orderly manner

and shall make every reasonable effort to keep expenditures for this purpose to a minimum.

- (d) **Payment upon Termination:** Upon termination of this Contract pursuant to para 8.2.9 hereof, the Institute shall make the following payments to Consultant Campus Master Plan (after offsetting against these payments any amount that may be due from Consultant Campus Master Plan to the Institute):
  - Fee for the Services satisfactorily performed prior to the effective date of termination.
  - Reimbursable expenditures actually incurred in satisfactory performance of Services prior to the effective date of termination.
- (e) **Disputes relating to Termination:** If Consultant Campus Master Plan disputes the notice of termination given by the Institute Consultant Campus Master Plan may, within fifteen (15) days after receipt of notice of termination, refer the matter for settlement of dispute pursuant to para 3 hereof.

### **(7.3) Settlement of Disputes and Arbitration**

(7.3.1) Except where otherwise provided in the Contract, all questions and disputes in relation to the Contract shall be dealt with as mentioned hereinafter:

- If Consultant Campus Master Plan considers any work demanded of him or any decision conveyed by the Institute in writing, or any action of the Institute to be in contravention of the terms and conditions of the Contract, Consultant Campus Master Plan shall promptly within fifteen (15) days request the Institute for settlement of dispute, failing which, the decision of the Institute shall be final, binding and conclusive and not referable to settlement committee or adjudication by the arbitrator.
- In case of any dispute or difference in relation to any terms and condition under this contract, either party at the first instance shall submit its case before the three member settlement committee as notified by the Institute for settlement of dispute. After submission of their written statements by the parties, within 7 days from the date the dispute has been raised, the settlement committee will make effort to get the dispute settled between the parties through open negotiation for next 15 days. After completion of such period of 15 days, the settlement committee shall issue its report declaring the outcome of the settlement proceedings.
- In the event, the parties fail to resolve the dispute through the settlement proceedings under clause above, the parties will be at liberty to refer all such disputes or difference for adjudication through

arbitration by a sole arbitrator appointed by the Institute. If the appointed sole arbitrator resigns his appointment or vacates his office due to any reason whatsoever, another sole arbitrator shall be appointed in the manner aforesaid and he shall proceed with the reference from the stage at which it was left by his predecessor. The party invoking arbitration shall give a list of disputes including the details of the amounts claimed – if any in respect of each such dispute. It is also a term of this Contract that if Consultant Campus Master Plan does not make any demand for appointment of arbitrator in respect of any claims in writing as aforesaid within fifteen (15) days of the cause of action, the claim of Consultant Campus Master Plan shall be deemed to have been waived and absolutely barred and the Institute shall be discharged and released of all liabilities under the Contract in respect of these claims.

- The arbitration shall be conducted in accordance with the provisions of the Arbitration and Conciliation Act, 1996 or any statutory modifications or reenactment thereof and the rules made there under and for the time being in force shall apply to the arbitration proceeding under this clause. It is also a term of this Contract that the arbitrator shall adjudicate on only such disputes as are referred to him by the appointing authority and give separate award against each dispute and claim referred to him. It is also a term of the Contract that fees, if required to be paid to the arbitrator shall be as laid down by the Indian Council of Arbitration and shall be shared equally by each of the parties.
- It is also a term of the Contract that the arbitrator shall be deemed to have entered on the reference on the date he issues notice to both the parties calling them to submit their statement of claims and counter statement of claims. The venue of the arbitration shall be IIT (ISM) Dhanbad or such place as may be fixed by the arbitrator in his sole discretion.
- It is also a term of this RFP that no person other than a person appointed by the Director, IIT (ISM) Dhanbad, as aforesaid should act as arbitrator and if for any reason, that is not possible, the matter is not to be referred to arbitration at all.

(7.3.2) The Institute may in its discretion, require Consultant Campus Master Plan to continue the work under Contract pending decision of the Arbitrator on the dispute(s) and if Consultant Campus Master Plan stops or suspends the work, it shall be treated as breach on its part and in such event, The Institute will be entitled to stop any payment as may be due to Consultant Campus Master Plan and appropriate as much part of the said Performance

Guarantee as the Institute considers reasonable to set off the loss caused to it due to the said stoppage/suspension of work.

- (7.3.3) This RFP shall be governed by the Indian Laws for the time being in force and it shall be deemed to have been executed at Dhanbad within the ordinary civil jurisdiction of the Competent Courts in the District, Dhanbad, Jharkhand

**(7.4) Testing of Materials**

Consultant Campus Master Plan shall provide assistance, instruments, materials, labor and any other arrangement normally required for testing, checking of materials and workmanship as stipulated in the specifications and by statutory authority at his own cost. The Institute has the right to appoint the testing authorities. In case, Engineer-In-Charge desires testing of materials from the testing authorities, Consultant Campus Master Plan shall arrange for the same. The testing fee of the testing authorities shall be borne by the Department, if the tested materials are found to be conforming to laid down specifications. In case after testing the materials are not found as per specifications, then the testing fees shall be borne by Consultant Campus Master Plan. Failing his so doing, the same shall be provided by the Engineer-In-Charge at the expense of Consultant Campus Master Plan and the expenses shall be deducted from any money due to Consultant Campus Master Plan under the contract and/or from the Security Deposit or proceeds thereof or of a sufficient portion thereof.

**(7.5) Consultant Campus Master Plan's Architect, Design Engineer, Site Engineer and Workmen**

- (7.5.1) Consultant Campus Master Plan shall give all necessary personal superintendence during the execution of the work and as long thereafter as the Engineer-In-Charge may consider necessary until the expiration of Defects Liability Period. Consultant Campus Master Plan shall employ competent Architect, Design Engineer, Site Engineer and Workmen as approved by the Engineer-In-Charge whose qualification must conform to the requirement specified by the Engineer-In-Charge who shall be constantly in attendance of the work while the men are at work. Any directions, explanations, instructions or notices given by the Engineer-In-Charge to such Architect, Design Engineer, Site Engineer and Workmen or any other authorized agent shall be held to be given to Consultant Campus Master Plan. In case, Consultant Campus Master Plan fails to provide Engineer-In-Charge as given in Special Conditions, the Institute shall have right to appoint the necessary Engineer-In-Charge personnel requisite staff needed for proper Supervision of work at the cost of Consultant Campus Master Plan for the period of currency of contract inclusive of Defect Liability Period.

- (7.5.2) Consultant Campus Master Plan shall on the request of the Engineer-In-Charge immediately dismiss from the works any person employed thereon who may in the opinion of the Engineer-In-Charge be unsuitable or incompetent or who may in the opinion of the Institute misconduct himself.

**(7.6) Faulty Materials, Workmanship and Defects after completion**

- (7.6.1) The Engineer-In-Charge shall have powers to require the removal from the site of all materials and work which in his opinion are not in accordance with specifications and in case of default, the Engineer-In-Charge shall be at liberty to employ other persons to remove the same without being answerable or accountable for any loss or damage that may happen or arise to such materials to be substituted thereof and in case of default the Engineer-In-Charge may cause the same to be supplied and all costs which may attend such removal and/or substitution are to be borne by Consultant Campus Master Plan.
- (7.6.2) If it shall appear to the Engineer-In-Charge or to the Institute based on audit/technical examination, that any work has been executed with unsound, imperfect, or unskillful workmanship or with materials of any inferior description or that any materials or articles provided by him for the execution of the work are unsound or of a quality inferior to that contracted for or otherwise not in accordance with the contract, any defects, shrinkage or other faults which may appear within the Defects Liability Period of 36 (Thirty Six) Months from the date of completion arising in the opinion of the Engineer-In-Charge, Consultant Campus Master Plan shall on demand in writing which shall be made within 36 (Thirty Six) Months of the completion of the work from the Engineer-In-Charge specifying the work, materials, articles defects or other faults complained of notwithstanding that the same may have been passed, certified and paid for, forthwith rectify, or remove and reconstruct the work so specified in whole or in part, as the case may require or as the case may be, remove the materials or articles so specified and provide other proper and suitable materials or articles at his own cost. In case of any such failure, the Engineer-In-Charge may rectify or remove or re-execute the work or remove and replace with others, the material or articles complained of as the case may be at the risk and cost in all respects of Consultant Campus Master Plan.
- (7.6.3) In lieu of rectifying the work not done in accordance with the contract, the Institute may, allow such work to remain, and in that case make allowance for the difference in value, together with such further reduction as in his opinion may be reasonable. However, this will not cover those works which are not technically acceptable.
- (7.6.4) Provided always that nothing in this clause shall relieve Consultant Campus Master Plan from his liability to execute the works in all respects



in accordance with the terms and conditions of this contract, or from his liability to make good all defects

**(7.7) Indemnifying against damages to persons, property and statutes**

- (7.7.1) Consultant Campus Master Plan shall be responsible for all injury to persons, animals or things, and for all damage, whether such injury or damage arises from carelessness or accident in any way connected therewith. This clause shall be held to include inter alia any damage due to causes as aforesaid to work, building (whether immediately adjacent or otherwise) and to roads, streets, footpaths, bridges or ways as well as all damage caused to the buildings and works forming the subject of this contract by inclemency of weather. Consultant Campus Master Plan indemnifies the Institute and holds him harmless in respect of all expenses arising from such injury or damages as aforesaid and also in respect of any award of compensation or damage consequent upon such claim including legal costs.
- (7.7.2) Consultant Campus Master Plan shall reinstate all damage of every sort mentioned in this clause, so as to deliver the whole of the contracted works complete and perfect in every respect and so as to make good and otherwise satisfy all claims for damage as aforesaid to the property of third parties.
- (7.7.3) Consultant Campus Master Plan also indemnifies the Institute against all claim which may be made upon the Institute for acts during the currency of this contract by an employee or representative of an employee of Consultant Campus Master Plan, employed by him, for any injury to or loss of life, of such employees, or for compensation payable under any law for the time being in force to any workmen or to the representative, of any deceased or incapacitated workmen.
- (7.7.4) Consultant Campus Master Plan also indemnifies the Institute against all claims which may be made upon the Institute for acts during the currency of this contract by the Central/State Government or local Municipal authorities for the noncompliance of any laws, regulations, rules pertaining to wages act, safety act in force and any amendments thereof in respect of all labor and apprentices directly or indirectly employed in the work under this contract.
- (7.7.5) The Institute shall be at liberty and is hereby empowered to deduct the amount of any damages, compensation costs, charges and/or expenses arising or accruing from or in respect of any such claim and/ or damages as aforesaid from any sum or sums due or to become due to Consultant Campus Master Plan or Security Deposit.
- (7.7.6) Consultant Campus Master Plan shall indemnify the Institute against any action, claim or proceedings relating to infringement or use of any patent or design or any alleged patent or design rights and shall pay any royalties

which may be payable in respect of any article or part thereof included in the contract. In the event of any claims made under or action brought against the Institute in respect of any such matters as aforesaid, Consultant Campus Master Plan shall be immediately notified thereof and Consultant Campus Master Plan shall bear liberty, at his own expense, to settle any dispute or to conduct any litigation that may arise therefrom. Provided that Consultant Campus Master Plan shall not be liable to indemnify the Institute if the infringement of the patent or design or any alleged patent or design right is the direct result of an order passed by the said Institute or his authorized representative.

**(7.8) Compliance of Labor Law**

Consultant Campus Master Plan shall comply with or cause to be complied with the Contract Labor (Regulation and Abolition) Act, 1970, Payment of wages Act, 1936, Minimum Wages Act, 1948, Employers Liability Act, 1938, Workmen's Compensation Act, 1948, Employees State Insurance Act, 1948 or any modifications thereof or any other law relating thereto and rules made thereunder from time to time

**(7.9) Mobilization Advance**

In specialized and capital intensive works costing not less than Rs. 2 Crores, Mobilization Advance limited to a maximum of 10 (Ten) % of the Tendered Value or Rs. 1 Crore whichever is less is payable in two equal instalment at 10 (Ten) % Simple Interest against Bank Guarantee of equivalent amount. The advance payment may be released in stages depending upon the progress of the work and mobilization of required equipment etc. The Mobilization Advance shall be adjusted in the bills in accordance to the Schedule of Fee of the RFP.

**(7.10) Completion Certificate**

As soon as the work is completed, Consultant Campus Master Plan shall give notice of such completion to the Engineer-In-Charge and within 10 (Ten) days of receipt of such notice the Engineer In-Charge shall inspect the work and shall furnish Consultant Campus Master Plan with a certificate of the work and shall furnish the Contractor with a certificate of completion indicating (a) the date of completion (b) defects to be rectified by Consultant Campus Master Plan (and/or) (c) item for which payment shall be made at reduced rates. When separate periods of completion have been specified for items or groups of items, the Engineer-In-Charge shall issue separate completion certificate for such items or groups of items. No certificate of completion shall be issued, nor shall the work be considered to be completed till Consultant Campus Master Plan shall have completed the work completely along clearance of site to the satisfaction of the Engineer-In-Charge.

**(7.11) Carrying out part work at risk and cost of Consultant Campus Master Plan**

If Consultant Campus Master Plan:

- (7.11.1) At any time makes default during currency of work or does not execute any part of the work with due diligence and continues to do so even after a notice in writing of 7 working days in this respect from the Engineer-in-Charge; or
- (7.11.2) Commits default in complying with any of the terms and conditions of the contract and does not remedy it or takes effective steps to remedy it within 7 working days even after a notice in writing is given in that behalf by the Engineer-in-Charge; or Fails to complete the work(s) or items of work with individual dates of completion, on or before the date(s) so determined, and does not complete them within the period specified in the notice given in writing in that behalf by the Engineer-in-Charge.
- (7.11.3) The Engineer- in-Charge without invoking action, without prejudice to any other right or remedy against Consultant Campus Master Plan which have either accrued or accrue thereafter to Government, by a notice in writing to take the part work /part incomplete work of any item(s) out of his hands and shall have powers to :
  - (a) Take possession of the site and any materials, constructional plant, implements, stores, etc., thereon; and/or
  - (b) Carry out the part work / part incomplete work of any item(s) by any means at the risk and cost of the contractor.

The Engineer-in-Charge shall determine the amount, if any, is recoverable from Consultant Campus Master Plan for completion of the part work/ part incomplete work of any item(s) taken out of his hands and execute at the risk and cost of Consultant Campus Master Plan, the liability of Consultant Campus Master Plan on account of loss or damage suffered by Government because of action under this clause shall not exceed 10% of the quoted value of the work. In determining the amount, credit shall be given to Consultant Campus Master Plan with the value of work done in all respect in the same manner and at the same rate as if it had been carried out by the original Consultant Campus Master Plan under the terms of his contract, the value of Consultant Campus Master Plan's materials taken over and incorporated in the work. The certificate of the Engineer-in-Charge as to the value of work done shall be final and conclusive against Consultant Campus Master Plan provided always that action under this clause shall only be taken after giving notice in writing to Consultant Campus Master Plan.

**(7.12) Escalation**

No escalation shall be paid.

**(7.13) Liquidated Damages and Compensation for Delay**

- (a) The time for carrying out the work as entered in the RPF shall be strictly observed by the Consultant Campus Master Plan and shall be deemed to be the essence of the RFP on the part of the Consultant Campus Master Plan. The work shall, throughout the stipulated period of the RFP, be proceeded with all due diligence and the Consultant Campus Master Plan shall pay as compensation an amount equal to  $\frac{1}{2}\%$  (Half Percent) or such smaller amount as the Employer (whose decision in writing shall be final) may decide on the amount of the whole work as shown in the agreement, for every week that the work remains non-commenced or unfinished after the proper dates subject to a maximum of 10% (Ten Percent) of the contract value.
- (b) And further to ensure good progress during the execution of the work, the Consultant Campus Master Plan shall be bound in all cases in which the time allowed for any work exceeds one month (save for special jobs) to complete  $\frac{1}{8}$ <sup>th</sup> (One-Eighth) of the whole of the work before  $\frac{1}{4}$ <sup>th</sup> (One-Fourth) of the whole time allowed under the contract has elapsed;  $\frac{3}{8}$ <sup>th</sup> (Three-Eighth) of the work before  $\frac{1}{2}$  (One-Half) of such time has elapsed, and  $\frac{3}{4}$ <sup>th</sup> (Three-Fourth) of the work before  $\frac{3}{4}$ <sup>th</sup> (Three-Fourth) of such time has elapsed. However for special jobs if a time schedule has been submitted by the Consultant Campus Master Plan and the same has been accepted by the Employer, the Consultant Campus Master Plan shall comply with the said time schedule. In the event of the Consultant Campus Master Plan failing to comply with this conclusion, he shall be liable to pay as compensation an amount equal to half per cent or such smaller amount as the Employer (whose decision in writing shall be final) may decide on the said cost of the work for every week that the due quantity of work remains incomplete. Provided that the entire compensation to be paid under the provisions of this clause shall not exceed ten percent on the cost of the work as shown in the agreement.

## SECTION 8

### SELECTION PROCEDURE & SUBMISSION OF PROPOSAL

#### (8.1) Selection Procedure

The process of selection of firm towards Campus Master Plan towards Main Campus of IIT (ISM) Dhanbad shall be conducted in four (4) stages as chronologically described, hereafter, in Para 8.1.1 through Para 8.1.5.

##### (8.1.1) Prequalification (*Stage 1*)

- (a) All queries and clarifications regarding this RFP and its contents must reach the Institute on or before 04:00 P.M. on 07 April 2022. Queries and clarifications sought may also be submitted by e-mail, sent to [ecmu@iitism.ac.in](mailto:ecmu@iitism.ac.in), before 04:00 P.M. on 07 April 2022. The Institute reserves the right not to entertain and/or answer any queries, clarifications and the like that are received after the said date and time.
- (b) The purpose of pre-qualification is to prepare a list of all eligible Applicants.
- (c) The prequalification shall be decided on the basis of evaluation of documentary evidence provided by the applicants in support of their eligibility according to the Primary Eligibility Criteria as listed in *Annexure 1*.

##### (8.1.2) Evaluation of Technical Capability (*Stage 2*)

- (a) Technical capability of all the applicants pre-qualified after Stage 1 shall be evaluated according to the prescribed Evaluation Criteria listed at *Annexure 2*.
- (b) The purpose of Evaluation of Technical Capability at Stage 2 is to further shortlist the Applicants based on their past experience, experience of key personal and financial strength. Only the shortlisted Applicants shall be eligible for participation in the next stage of Technical Evaluation.
- (c) The Institute will constitute a Committee to award marks i.e. Technical Score 1 (TS1) out of maximum 100 marks to the pre-qualified applicants on the basis of the documents and details submitted in support of the prescribed Evaluation Criteria
- (d) A proposal will be considered unsuitable and shall be rejected if it does not respond to the RFP document.
- (e) The Committee shall prepare a list in order of merit for shortlisting any number of Applicants on the basis of marks awarded as per the prescribed Evaluation Criteria (*Annexure 2*). Merit list shall include only those applicants for next stage of qualification who will

score at least 50 % marks in each individual section and overall 60% marks.

(f) In case of a tie in marks between any number of applicants at any rank, preference shall be applied in the following order:

- First preference to the applicant with highest marks in section 3 of evaluation criteria;
- Next preference to the applicant with highest marks in section 2 of evaluation criteria;
- Next preference to the applicant with highest marks in section 1 of evaluation criteria;
- The marks allotted to various applicants shall be the sole prerogative of the Committee. The decision of the Committee shall be final and binding on all.

(8.1.3) Evaluation of Technical Proposals (Stage 3)

- (a) The Committee constituted by the Institute will review and evaluate the options and themes related to Campus Master Plan proposed by the qualified applicants shortlisted after Stage 2. The Committee shall consist of experts from architectural, engineering, technological education, and different perspectives. A separate eMail will be forwarded to the applicants shortlisted for Stage 3 with other details.
- (b) The purpose of Evaluation of Technical Proposals at Stage 3 is to finalize the top three applicants for opening of Financial Bids
- (c) The presentation shall broadly include:

<i>S. No.</i>	<i>Evaluation Criteria for Technical Proposals</i>
1	Design Concept and understanding of assignment, approach and methodology
2	Creativity and Value
3	Understanding of material concepts
4	Presentation and communication
5	Capability and suitability for project delivery
6	A brief Introduction about the firm, similar projects undertaken, etc
7	The proposal
8	Qualification and competence of the key personnel for the assignment
9	Proposed work plan and time schedule

- (d) Each invited applicant will be allowed maximum 35 minutes for the presentation followed by up to 25 minutes for questions/viva-voce by the jury/committee.
- (e) Applicants are advised to make themselves available for the presentation and viva-voce before the jury at the time and date given by IITISM
- (f) Based on the broad evaluation parameters as given in the previous Para, the Committee shall decide on the detailed parameters for award of marks, with 100 maximum marks, for Stage 3.
- (g) Each of the qualified applicants shortlisted after Stage 2, shall be evaluated by the Committee and awarded marks i.e. Technical Score (TS) out of maximum 100 marks.
- (h) The Committee shall select three top ranking technical proposals from the shortlist of applicants. Only these three applicants shall be called for opening of their financial bids.
- (i) The discretion and decision of the Committee in respect of the award of marks for the Technical Proposals shall be final and binding on all applicants without any right of appeal.
- (j) The Technical score (TS) of the applicants shall be announced before opening of the financial bids.
- (k) Sufficient drawings (plans, sections, elevations, views, details) on A-1 size sheets as well as a PowerPoint Presentation in soft copy to communicate the design intent, features of the design, reference images, including references from applicants' previous work, etc. at a scale and format of the applicant's choice limited to the volume that will be prescribed in the detailed brief of areas and requirements of buildings as well as format of submission to be given to the qualified applicants in shortlisting after Stage 2. The selection of the material to be selected is left to the applicants with the caveat that the material must be selected such that it conveys to the committee/jury what the applicants wish to drive home. Too little information or too much volume of submissions shall both be counterproductive. Lack of legibility, scale and clarity shall go against the applicant in not being able to influence the jury. Construction technologies, structural methods, materials and finishes, systems for building services, crafts inputs, and ecological benefits that the applicants may like to highlight shall be included.
- (l) Sufficient report on A3 size sheets as well as soft copy describing the design approach and achievements as well as the preliminary area and cost estimates of the proposed development as per the design and technologies proposed, giving breakups for net usable carpet area, circulation, services' areas and their respective costs for all the

buildings, with cost-benefit analysis of the systems and the proposed work plan and time schedule.

(m) Applicants shall submit a sealed envelope for submission of Technical proposal, with the words “Proposal for .....(name of the particular category of buildings)” clearly superscribed over the envelope.

(8.1.4) Opening of Financial Bids, Final Selection and Award of Work (Stage 4)

- (a) Financial proposals shall be opened in the presence of applicants or their representatives who choose to attend.
- (b) After opening of the financial proposals of the all the shortlisted bidders at Stage 3, the Lowest Financial proposal amongst all opened Financial proposals shall be given a financial score of 100 marks. The financial score of other proposals will be determined using the following formula:

$$FS = 100 \times FL / F$$

Here FS is the financial score, FL is the Lowest Financial proposal among all, and F is the Financial proposal of the particular applicant for the particular category of buildings.

- (c) For the purpose of calculation of composite score (S) for each proposal, the weightage shall be 70% for Technical Score (TS) and 30% for Financial Score (FS) of the respective applicants. The Composite Score shall be calculated using the following formula:

$$S = TS \times 0.7 + FS \times 0.3$$

- (d) Proposals will be ranked according to their composite scores and will be listed in the order of merit as H1, H2, and H3 per category of buildings.
- (e) The top scorer H1 per category of buildings may be eligible for award of work or part thereof, at the discretion of the Institute.
- (f) In case of a tie at the top position between two or more applicants, preference shall be given to the applicant who has a higher Technical Score (TS), and this applicant will be required to match the lowest price bid amongst those in the tie.
- (g) In case the applicant selected in a tie, as referred above, refuses to accept the lowest price bid, the next applicant (in the order of merit list for technical proposals) shall be invited for the acceptance of the lowest price bid; and so on, till the lowest price bid is matched.
- (h) The selection above does not automatically confer any right whatsoever on any applicant for award of whole of the work as described in the scope of services or part thereof.
- (i) The Institute reserves the right to award whole of the work or part thereof to any other shortlisted applicant(s) or its constituents,



consultants or sub-consultants, or any individual or agency other than those shortlisted, as it may deem fit.

- (j) Consultant Campus Master Plan selected, may be called for negotiations, if any, by the Institute, regarding all aspects of the financial as well as technical proposals submitted by it in response to the RFP, before the award of work or part thereof.
- (k) In case of successful conclusion of the negotiations, the Institute will confirm to the selected organization its selection as Consultant Campus Master Plan, through a "Letter of Intent" by email/letter clearly stating the extent and the price agreed upon at the time of negotiations.
- (l) Consultant Campus Master Plan shall, thereafter, sign the Contract agreement within 15 days of the issue of such letter. The format of the Agreement is attached at *Annexure 9*. The RFP shall be deemed to form a part of the Contract.
- (m) The technical proposal as submitted by the successful applicant shall not be deemed to be the final proposal towards the Development of Campus Master Plan. As per mandate of this RFP, the successful applicant(s), appointed as Consultant Campus Master Plan, shall have to comply with the Scope of Services as outlined in Section 3 to develop and arrive at proposals for all contracted components of the Scope of Services, to the satisfaction of the Institute and its approval thereof.
- (n) The ownership of the proposals of all the applicants shall lie with the Institute in both the soft and hard copy.

(8.1.5) Necessary documents to be attached with Application:

S. No.	List of document required
1	Company Registration Certificate
2	Complete company profile
3	Valid GSTN copy.
4	PAN Card Copy.
5	Turnover certificate
6	Balance Sheet of last four years (To check the company compliance for profit)
7	Experience proof documents (completion certificates/POs of previous customers)
8	Technical Proposals with contact details of the two references (Previous customers preferably in last two years)
9	Financial Proposals indicating rate/unit of various item separately.
10	Proof of Submission of Processing Fee of Rs. 20,000

(8.2) Submission of Proposal

(8.2.1) Applicants shall submit their Request For Proposal (RFP) subject to eligibility as per the Primary Eligibility Criteria for the respective category.

(8.2.2) Applicants shall be required to submit their proposals in the following manner:

- (a) Submission of Statement of Prequalification, Technical Capability and Financial proposal.

(8.2.3) Applicants shall submit their proposals on or before 04.00 PM of 21 April 2022 at the following address:

**The Director**

Indian Institute of Technology (ISM) Dhanbad

Main Campus

Dhanbad 826 004

(Jharkhand)

(8.2.4) Submission shall include

- (a) Documents in two (2) copies, in support of Prequalification as per Primary Eligibility Criteria at Annexure 1.
- (b) Documents in two (2) copies, in support of Technical Capability as per Evaluation criteria at Annexure 2.
- (c) Processing Fees in one (1) copy, a separate sealed cover marked "Processing fees for Campus Master Plan on Turnkey Basis in Main Campus of IIT (ISM) Dhanbad".
- (d) Financial Proposal in one (1) copy, in a separate sealed cover marked "Campus Master Plan on Turnkey Basis in Main Campus of IIT (ISM) Dhanbad".
- (e) All the various envelopes and other documents shall be placed in one single sealed cover clearly marked as "Campus Master Plan for IIT (ISM) Dhanbad on Turnkey Basis in Main Campus of IIT (ISM) Dhanbad" with name of the applicant and contact details written thereon.

(8.2.5) Presentation

- (a) After the submission of the proposal, IIT (ISM) Dhanbad shall call all of the shortlisted applicants to make a presentation.
- (b) Each invited applicant will be allowed maximum 60 minutes for the presentation followed by up to 30 minutes for questions/ viva-voce by the Committee.
- (c) The presentation shall include:
  - A brief Introduction about the firm, similar projects undertaken, etc.
  - The proposal as above

- Qualification and competence of the key personnel for the assignment
  - Design Concept and understanding of assignment, approach and methodology
  - Creativity and Value Engineering
  - Understanding of material concepts
  - Presentation and communication
  - Capability and suitability for project delivery
- (d) Applicants are advised to make themselves available for the presentation and viva-voce before the Committee at the time and date given by IIT (ISM) Dhanbad.

(8.2.6) Format for Financial Proposal

- (a) The financial proposal shall be submitted on Consultant Campus Master Plan letterhead and follow the format as specified in ***Annexure 10***
- (b) The financial proposal shall be complete, unconditional and free from any computational errors.
- (c) The quoted fees percentage shall remain fixed for the entire period of Contract with no condition for escalation whatsoever.
- (d) The quoted fees shall be inclusive of all expenses (both direct and indirect) relating to the performance of the Contract for the entire period of Contract.
- (e) Omissions if any, shall not entitle the Applicant to be compensated. The liability to fulfill obligations as per scope of work within the total quoted fees shall rest solely with the Applicant.
- (f) All fees/charges relating to statutory approvals, payable to local bodies and other authorities/agencies, shall be dealt by Applicant.
- (g) All fees/charges payable as per the terms of appointment of agencies approved and appointed by IIT (ISM) Dhanbad for vetting of designs and related calculations shall be paid directly by the Institute.
- (h) Compliance with the foreign exchange regulation of India or any other country while making this proposal shall be the sole responsibility of the applicant; and IIT (ISM) DHANBAD shall in no way be involved directly or indirectly.

(8.2.7) General Conditions and important instructions

- (a) The applicant shall bear all costs relating to the preparation and submission of proposals at all stages as sought in the RFP.

- (b) Each proposal whether layouts or services systems or policy or any other, must be duly supported by clearly referenced data presented in a logical and quantifiable format.
- (c) All proposals must be based on clearly referenced global best-practices and technologies, and must respect clearly identified and listed local constraints, resources and skills.
- (d) The Institute reserves the right to seek more details regarding the proof of qualifications, experience and capabilities of the key personnel.
- (e) The Institute reserves the right to issue corrigenda and addenda to this RFP document which shall be binding on all applicants.
- (f) The Institute reserves the right to amend, alter, modify, add and/or delete in part or full any requirements or terms and conditions contained in the RFP document at any time up to the stage of submission of Proposal, which shall be binding on all applicants.
- (g) All dates, place and time are subject to change and participants should regularly check for updated schedules on the Institute's website.
- (h) All latest information and clarifications, if any, shall be posted on the Institute's website. Applicants are advised to visit the website [www.iitj.ac.in](http://www.iitj.ac.in) at regular intervals for any update with respect to the selection process.
- (i) The documents, and other information provided by IIT (ISM) Dhanbad or submitted by the applicants to IIT (ISM) Dhanbad, shall become and remain the property of the Institute.
- (j) All Intellectual Property Rights of the schemes and proposals submitted during the process of selection, shall rest with IIT (ISM) Dhanbad.
- (k) No explanation and/or justification in any aspect relating to the selection process shall be given, and the decision of the Institute shall be final and binding on all without any right of appeal.
- (l) All provisions in this document are supplementary and complementary to each other and are not to be read in isolation.

(8.2.8) Disqualifications during selection

- (a) In the case where the constitution of the consortium, that has entered into contract with the Institute, is changed in any manner whatsoever at any stage, the Institute reserves the right to take appropriate decision regarding the termination of contract or modification in the scope of services, in full or part thereof.
- (b) The Institute reserves the right to debar the applicant/terminate the agreement with the final applicant selected for award of work, at any point of time, should any of the document/certificates as submitted

- be found to be fabricated or false, or a material misrepresentation is made or discovered, or the applicant does not provide the requisite information as required by the Institute within the stipulated period.
- (c) The Institute reserves the right to take appropriate decision in the cases where any contract of the applicant (of any constituent member – in case of consortium) is found to be in arbitration with any state or central government.
- (d) Disqualifications: IIT (ISM) Dhanbad may, at its sole discretion and at any time during the process of selection, disqualify any applicant, if:
- The applicant has made misleading statements and/or has submitted false documents as part of this RFP submission at any stage of the selection process.
  - The applicant submits a proposal that is incomplete and/or not accompanied by such documents as are required by the Institute.
  - The applicant fails to provide clarifications related thereto, when sought;
  - The applicant fails to submit document(s) that are sought as a part of this RFP, strictly in the form and manner specified by the Institute.
  - The applicant has been declared ineligible by the Government of India/State/UT Government for corrupt and fraudulent practices, or blacklisted.
  - The applicant submits a proposal with price or percentage escalation provision or offers conditional financial bid.
  - The applicant is found to be indulging in activities that may directly or indirectly attempt to influence the process of selection either in their own favor or against any other participants.

The constitution of the consortium invited to submit proposals according to this RFP or that is selected to be Consultant Campus Master Plan, is changed in any manner whatsoever.

## SECTION 9

### ANNEXURE

#### ANNEXURE 1

##### PRIMARY ELIGIBILITY CRITERIA

1. The proprietor/all partners of the Architects/Architectural Firms (whether applying individually or as part of a consortium) shall be registered with the Council of Architecture, India.
2. The Lead consultants (in the case of consortiums) shall be Architects/Architectural firm with its registered office in India with minimum five (5) years of continuous operation up to the date of publication of this RFP.
3. The Consultant Campus Master Plan (in the case of consortiums) shall have an aggregate turnover as per the enclosed table, in any three (3) of the last five (5) Financial Years and with a positive net profit for each of the three years considered. Turnover shall mean consultancy fee received during each year.

S. No.	Applicable Project sub-head	Minimum Annual Turnover (in Rs. Crores)
2.1	Campus Master Plan	Six (06)

4. Consultant Campus Master Plan constituent of the consortium (in the case of consortiums) shall not be barred or blacklisted by any Central and/or State Government in India, during the last five (5) years.
5. Consultant Campus Master Plan, constituent of the consortium (in the case of consortiums) shall not have, during the last five (5) years, either failed to perform on any agreement, or been expelled from any project or have any agreement terminated for breach on their part.
6. The Architects / Architectural Firms/ Consultants or one of the members of the consortium (in the case of consortiums) shall, in the last five (5) years, have successfully rendered Campus Master Planning to Government / Semi Government / Public sector undertakings or reputed private organizations for buildings/laboratories/complexes for institutions of technical education or scientific research for:
  - (6.1) At least three similar works of minimum gross built-up area of 80,000 sqm each; or
  - (6.2) At least two similar works of minimum gross built-up area of 50,000 sqm each; or
  - (6.3) One similar work of minimum gross built-up area of 40,000 sqm.

Applicants shall provide sufficient information and valid proof for each project listed for meeting the primary eligibility criteria including sufficient updated contact numbers of employers, owners or promoters of the projects. If in the opinion of the Committee, sufficient information and valid proof is not available about some project during evaluation, the applicant may be declared ineligible under the primary eligibility criteria.

7. Solvency certificate from a Nationalized Bank is required towards above work.

## EVALUATION OF TECHNICAL CAPABILITY

NAME OF THE APPLICANT:

ADDRESS:

CONTACT DETAILS:

S.No.	Criterion	Maximum Marks	Marks Awarded
<b>A</b>	<b>Organizational Strength of the Applicant</b>	<b>30</b>	
(i)	Period of business for the firm or lead consultant (in case of consortium) on the date of submission of RFP offer: > 5 and ≤ 10 years: Marks 1 > 10 years: add 0.5 Marks (to above Marks) for each year completed above 10 years	5	
(ii)	Scale of operations/Location of Offices More than 3 locations: 5 Marks 2 to 3 locations: 2 Marks 1 location: 1 Marks NOTE: • Each such office with minimum 5 nos. of in-house professionally qualified staff [as defined in serial (iii) below] only shall be considered.	5	
(iii)	Presence of in-house professionally qualified staff in the firm (in case of single applicant) or with the lead consultant (in case of consortium) in following indicative categories:	20	



	<ul style="list-style-type: none"> <li>• Architects</li> <li>• Urban Designers</li> <li>• Landscape Architects</li> <li>• Structural Engineers</li> <li>• Civil Engineers</li> <li>• Mechanical Engineers</li> <li>• Electrical Engineers</li> <li>• Public Health Engineers</li> <li>• Environmental Planners/Engineers</li> <li>• Other Professional/Scientific Staff</li> </ul> <p>Marks 'per employee' on experience:</p> <p style="text-align: right;">&gt;15 years: 1.0 Marks</p> <p style="text-align: right;">&gt;7 and upto 15 years: 0.5 Marks</p> <p style="text-align: right;">≥3 and upto 7 years: 0.25</p> <p>Marks NOTES:</p> <ul style="list-style-type: none"> <li>• <i>List of all such persons with their field of specialization and date of their appointment with the firm to be furnished as per prescribed format</i></li> <li>• <i>Only qualified staff employed on regular/contract basis for more than two continuous years as on 31st March 2022 to be considered</i></li> <li>• <i>For each listed individual, please attach self-attested certificates by the Head signatory of the company duly signed and stamped on or after the date of publishing of RFP.</i></li> </ul>		
<b>B</b>	<b>Experience of Work</b>	<b>50</b>	
(i)	<p>Number of Educational/Research Institute Projects successfully completed in the last 10 years till the date of submission of RFP offer:</p> <p>Marks 'per project' based on project cost:</p> <p style="text-align: right;">&gt;100 crore: 5 Marks</p> <p style="text-align: right;">&gt;80 and upto 100 crore: 4 Marks</p> <p style="text-align: right;">&gt;60 and upto 80 crore: 3 Marks</p> <p style="text-align: right;">&gt;40 and upto 60 crore: 2 Marks</p> <p style="text-align: right;">≥20 and upto 40 crore: 1</p> <p>Marks NOTES:</p> <ul style="list-style-type: none"> <li>• <i>Only the Projects having gross built-up area of 10,000</i></li> </ul>	12	

	<p><i>sqm or more; and with cost (excluding land cost) of Rs. 20 crores or more shall be considered.</i></p> <ul style="list-style-type: none"> <li><i>Gross built-up area would mean academic area other than recreational, commercial, residential, hostels, support functions/public facilities and services in multifunction campus developments.</i></li> <li><i>Documents clearly substantiating cost of projects and their relevant built-up areas claims to be attached.</i></li> </ul>		
(ii)	<p>Experience of design of complex academic building/campuses types as follows within one project:</p> <ul style="list-style-type: none"> <li>(a) Classrooms/Lecture halls</li> <li>(b) Library</li> <li>(c) Core/UG/PG teaching labs</li> <li>(d) Research/industrial projects labs</li> <li>(e) Faculty rooms/offices</li> <li>(f) Mechanized Workshops</li> <li>(g) Centralized computer/data centre</li> <li>(h) Auditorium/Conventions(≥1500 capacity/complex)</li> <li>(i) Science Museum (≥1000 sqm)</li> <li>(j) Sports facilities</li> </ul> <p>Marks per project based on building types designed:</p> <p style="text-align: right;">upto 10 types: 2.5</p> <p style="text-align: right;">Marks upto 8 types:</p> <p style="text-align: right;">2.0 Marks upto 6</p> <p style="text-align: right;">types: 1.5 Marks upto</p> <p style="text-align: right;">4 types: 1.0 Marks</p> <p style="text-align: right;">upto 2 types: 0.5</p> <p style="text-align: right;">Marks</p> <p>(Maximum 2.5 marks per project)</p> <p>NOTE:</p> <ul style="list-style-type: none"> <li><i>Educational/Research Institute projects with gross built up area of 10,000 sqm or more; and those that are completed or are nearing completion in the last 10 years till the date of submission of RFP offer shall only be considered.</i></li> </ul>	10	

(iii)	<p>Experience of design of energy efficient buildings. Factors to be considered as experience include all building orientation, design, envelope performance, passive features, energy conservation features, day lighting, and others as per the applicant that could be in response to demands of certification systems or not (though certification itself will not count as experience)</p> <p>Marks per project based on factors achieved:</p> <p style="text-align: right;">5 factors: 2.0 Marks 4 factors: 1.5 Marks 3 factors: 1.0</p> <p>Marks upto 2 factors: 0.5 Marks Maximum 2 marks for each project <i>NOTES:</i></p> <ul style="list-style-type: none"> <li>• <i>Only buildings with gross built up area of 5,000 sqm or more (excluding built-up for housing/residential units) and that are completed or are nearing completion in the last 10 years till the date of submission of RFP offer shall be considered.</i></li> <li>• <i>Only buildings with visible or documented use of above methods shall be considered.</i></li> </ul> <p><i>Documents clearly substantiating relevant claims to be attached.</i></p>	8	
(iv)	<p>Experience of buildings integrating smart building technologies or smart grids</p> <ul style="list-style-type: none"> <li>• <i>Only buildings with visible or documented use of above methods shall be considered.</i></li> <li>• <i>Documents clearly substantiating relevant claims to be attached.</i></li> </ul>	2	
v)	<p>Experience of design of resource efficient campuses and buildings. Factors to be considered as experience include all water harnessing, water conservation and recycling features, waste segregation and management, lowering embodied energy, and others as per the applicant that could be in response to demands of certification systems or not (though certification itself will not count as experience)</p> <p>Marks per project based on factors achieved:</p>	4	

	<p>3 factors: 1.0 Marks upto 2 factors: 0.5 Marks</p> <p>Maximum 1 mark for each project</p> <p>NOTES:</p> <ul style="list-style-type: none"> <li>• Only buildings with gross built up area of 5,000 sqm or more (excluding built-up for housing/residential units) and that are completed or are nearing completion in the last 10 years till the date of submission of RFP offer shall be considered.</li> <li>• Only buildings with visible or documented use of above methods shall be considered.</li> </ul> <p>Documents clearly substantiating relevant claims to be attached.</p>		
(vi)	<p>Experience in sufficient use of local construction practices, crafts, materials, and systems, or enhanced engineered version of traditional techniques (such as CSEB or rammed earth technology) – Marks 1 for each project</p> <p>NOTES:</p> <ul style="list-style-type: none"> <li>• Only buildings with gross built up area of 5,000 sqm or more and those that are completed or are nearing completion in the last 10 years till the date of submission of RFP offer shall be considered.</li> <li>• Only buildings with visible and documented use of above methods shall be considered.</li> <li>• Documents clearly substantiating relevant claims to be attached.</li> </ul>	4	
(vii)	<p>Experience of buildings or planning for solar parks or renewable energy installations (&gt; 1 MW) – Marks 1 each</p> <ul style="list-style-type: none"> <li>• Only buildings with visible or documented use of above methods shall be considered.</li> <li>• Documents clearly substantiating relevant claims to be attached.</li> </ul>	2	

(viii)	Experience within India with Central/State Government/PSU/ Autonomous bodies on projects with gross built-up area of minimum 10,000 sqm per project  Marks 2 for each, totaled  Bonus 1 mark per project for UG/PG academic campuses	8	
<b>C</b>	<b>FINANCIAL CAPABILITY</b>	<b>20</b>	
(i)	Gross Financial turnover in last five financial years (aggregate of the last five financial years)  Up to Rs. 5 Crore – Marks 0  More than Rs. 5 Crore – 1 Marks for every Rs. 0.25 Crore/year (or part thereof) above Rs. 5 Crore.  NOTES:  <ul style="list-style-type: none"> <li><i>Audited financial results of all relevant years and summary to be submitted as per Annexure 14</i></li> <li><i>Gross Financial turnover shall mean the sum total of the Annual Financial turnovers in last five financial years (Add for all consortium members in case of consortium)</i></li> <li><i>For the purposes of turnover only the fee received on account of consulting services shall be taken into account.</i></li> </ul>	20	
	<b>TOTAL (A + B + C)</b>	<b>100</b>	

- It is recommended that applicants put forward copies of independent documents testifying to their organizational strength, experience, and financial performance.
- Applicants shall provide sufficient information and valid proof for each parameter/factor assigned for calculating the marks in the evaluation criteria including sufficient updated contact numbers of employers, owners or promoters of the projects. If in the opinion of the Committee, sufficient information and valid proof is not available about some parameter/factor during evaluation, zero (0) marks may be assigned to that parameter/factor.
- Information as sought is to be given by individual applicant or each member of the consortium including lead member separately as per the prescribed formats given in various annexures.
- Ongoing projects and/or virtual completion shall be considered for evaluation only wherever clearly specified in the particular evaluation criterion.
- Gross Built-up Areas mentioned are for one single project unless stated otherwise in the particular evaluation criteria.
- Wherever sought, “experience” as on date of issue of RFP shall be considered for all purposes unless stated otherwise in the particular evaluation criteria.

- The Committee/Jury appointed by the Institute at its sole discretion, shall have the right to interpret various aspects of the evaluation criterion as it deems fit. The decision of the committee on such interpretation and awards of marks shall be final and binding. No reasons whatsoever shall be furnished regarding award of marks.

## APPLICANT'S PROFILE

1.	Name of Applicant:
2.	<p>State the structure of the applicant's organization : (indicate as appropriate)</p> <p>Public Sector Organization/Educational Institute Individual company Firm Consortium</p>
3.	<p>Individual applicant or lead member (in case of consortium) to provide this information:</p> <ol style="list-style-type: none"> <li>1. Name of the company / firm:</li> <li>2. Individual applicant company / lead member of consortium:</li> <li>3. Legal status of company:</li> <li>4. Registration No. with the Country of Registration:</li> <li>5. Year of Registration:</li> <li>6. Registered address:</li> <li>7. Principal place of business:</li> <li>8. Address of Branch Offices (own):</li> <li>9. Whether wholly/partially owned subsidiary of foreign company: Yes/No (give details)</li> <li>10. Name and address of Principal/Parent Company (if applicable) :</li> <li>11. Name of contact person:</li> <li>12. Contact person's designation:</li> <li>13. Address, telephone, fax no., email address of contact person:</li> </ol>
4.	<p>For applicants in consortium, state the following information for each member of consortium other than lead member (include additional sheet if required):</p> <ol style="list-style-type: none"> <li>1. Name of Company / Firm:</li> <li>2. Legal status of company:</li> <li>3. Registration No. with the Country of Registration:</li> <li>4. Year of Registration:</li> <li>5. Registered Address:</li> <li>6. Principal Place of Business:</li> <li>7. Address of Branch Offices (own):</li> <li>8. Whether wholly/partially owned subsidiary of foreign company: Yes/No (give details)</li> <li>9. Name and address of Principal/Parent Company (if applicable) :</li> <li>10. Name of contact person:</li> <li>11. Contact person's designation:</li> <li>12. Address, telephone, fax no., email address of contact person:</li> </ol>

5.	<p>Does the RFP application contain the processing fees documents as required?</p> <p>Yes/No</p>								
6.	<p>Does RFP application contain the Board Resolution/Power of Attorney/ Authority Letter, which empowers the person or persons to sign the letter of application?</p> <p>Yes/No</p> <p>If no, give reasons</p>								
7.	<p>State the number of years the applicant (or each constituent member in case of consortium) has been in business under the business name appearing in the answer to question 3 and 4 above.</p> <table border="0"> <thead> <tr> <th>Name</th> <th>No. of years</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td></td> </tr> <tr> <td>2.</td> <td></td> </tr> <tr> <td>3.</td> <td></td> </tr> </tbody> </table>	Name	No. of years	1.		2.		3.	
Name	No. of years								
1.									
2.									
3.									
8.	<p>State the number of years the applicant (or each constituent member in case of consortium) has been in business undertaking work similar in scope and nature of work for which shortlisting is sought</p> <table border="0"> <thead> <tr> <th>Name</th> <th>No. of years</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td></td> </tr> <tr> <td>2.</td> <td></td> </tr> <tr> <td>3.</td> <td></td> </tr> </tbody> </table>	Name	No. of years	1.		2.		3.	
Name	No. of years								
1.									
2.									
3.									
9.	<p>Individual applicant / each member of consortium shall compile a list showing their experience of work as per Annexure 10 and 11a/11b in the manner and for the period indicated in the annexures (attach separate sheets duly referred)</p> <p>Do you authorize IIT (ISM) Dhanbad to make enquires with any of the clients listed by the applicant?</p> <p>Yes/No</p> <p>Have you (each constituent member in case of consortium) provided information regarding experience of work as per Annexure 10 and 11a/11b</p> <p>Yes/No</p>								



10.	<p>Do individual applicants or members of consortium have in-house facility of all services and related staff?</p> <p>Yes/No</p> <p>If yes, whether necessary documents regarding staffing with various services consultancy organizations are attached with this RFP application?</p> <p>Yes/No</p>
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- Applicants shall provide sufficient information and valid proof for each parameter/ factor assigned for calculating the marks in the evaluation criteria. If in the opinion of the Committee, sufficient information and valid proof is not available about some parameter/ factor during evaluation, zero (0) marks may be assigned to that parameter/ factor or the applicant may be considered ineligible as the case may be, depending on the stage of selection.
- IIT (ISM) Dhanbad reserves the right to seek additional documentary evidence from applicants in support of their respective statements.

#### **Note**

- (1) *It is recommended that applicants put forward copies of independent documents testifying to their organizational strength, experience, and financial performance.*
- (2) *Applicants shall provide sufficient information and valid proof for each parameter/factor assigned for calculating the marks in the evaluation criteria including sufficient updated contact numbers of employers, owners or promoters of the projects. If in the opinion of the Committee, sufficient information and valid proof is not available about some parameter/factor during evaluation, zero (0) marks may be assigned to that parameter/factor.*
- (3) *Information as sought is to be given by individual applicant or each member of the consortium including lead member separately as per the prescribed formats given in various annexures.*
- (4) *Ongoing projects and/or virtual completion shall be considered for evaluation only wherever clearly specified in the particular evaluation criterion.*  
*Wherever sought, "experience" as on date of issue of RFP shall be considered for all purposes unless stated otherwise in the particular evaluation criteria.*
- (5) *The Committee constituted by the Institute at its sole discretion, shall have the right to interpret various aspects of the evaluation criterion as it deems fit. The decision of the committee on such interpretation and awards of marks shall be final and binding. No reasons whatsoever shall be furnished regarding award of marks.*

(1) **Sample Integrity Agreement**

This Integrity Agreement is made at \_\_\_\_\_ on this \_\_\_\_\_ day of \_\_\_\_\_ 2021

**BETWEEN**

The Director, IIT (ISM) Dhanbad

**AND**

(Name and Address of the Individual/firms/Company)

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 (NIT, No. \_\_\_\_\_, Dated: \_\_\_\_\_) (hereinafter referred to as "Tender/Bid") and intends to award, under laid down organizational procedure, contract for *Campus Master Plan Towards Main Campus of IIT (ISM) Dhanbad* 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 witness 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, 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/Owner's 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 participate 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 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 willful 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/Owner's 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 anticorruption 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/ holiday listing 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 Subcontractors/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 Pact as specified above, unless it is discharged/determined by the Competent Authority, IIT (ISM) Dhanbad.

## **ARTICLE 7**

### ***OTHER PROVISIONS***

- (1) This Pact is subject to Indian Law, place of performance and jurisdiction is the Headquarters of the Division 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)

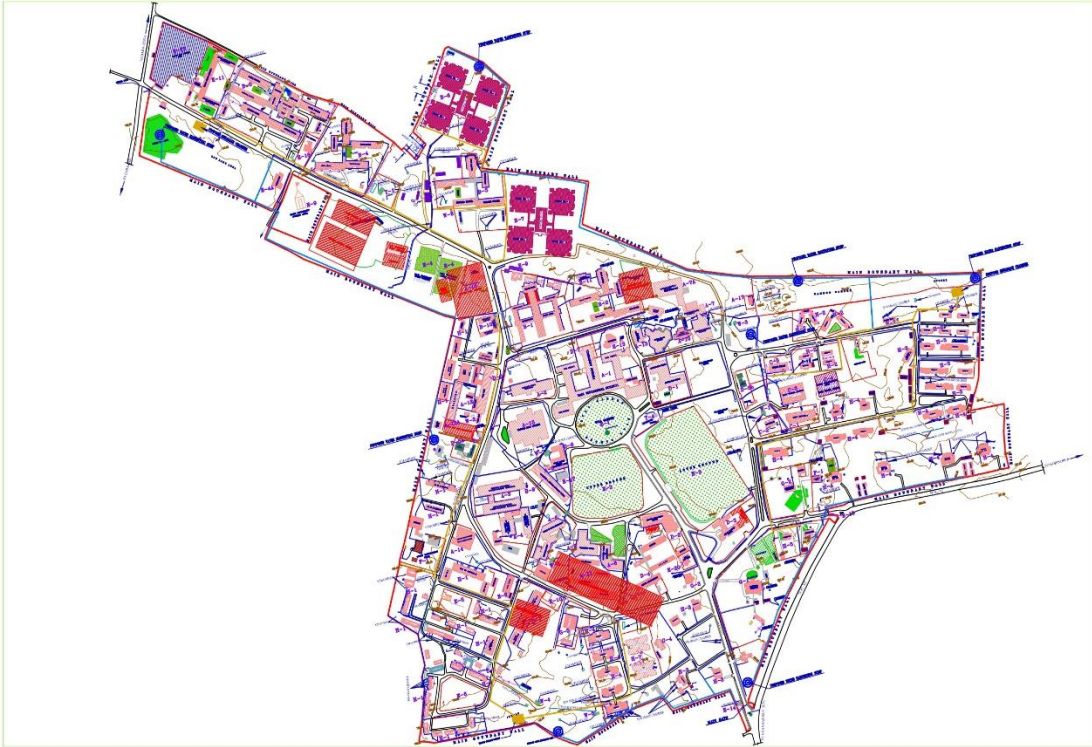
(2) \_\_\_\_\_

(Signature, Name and Address)

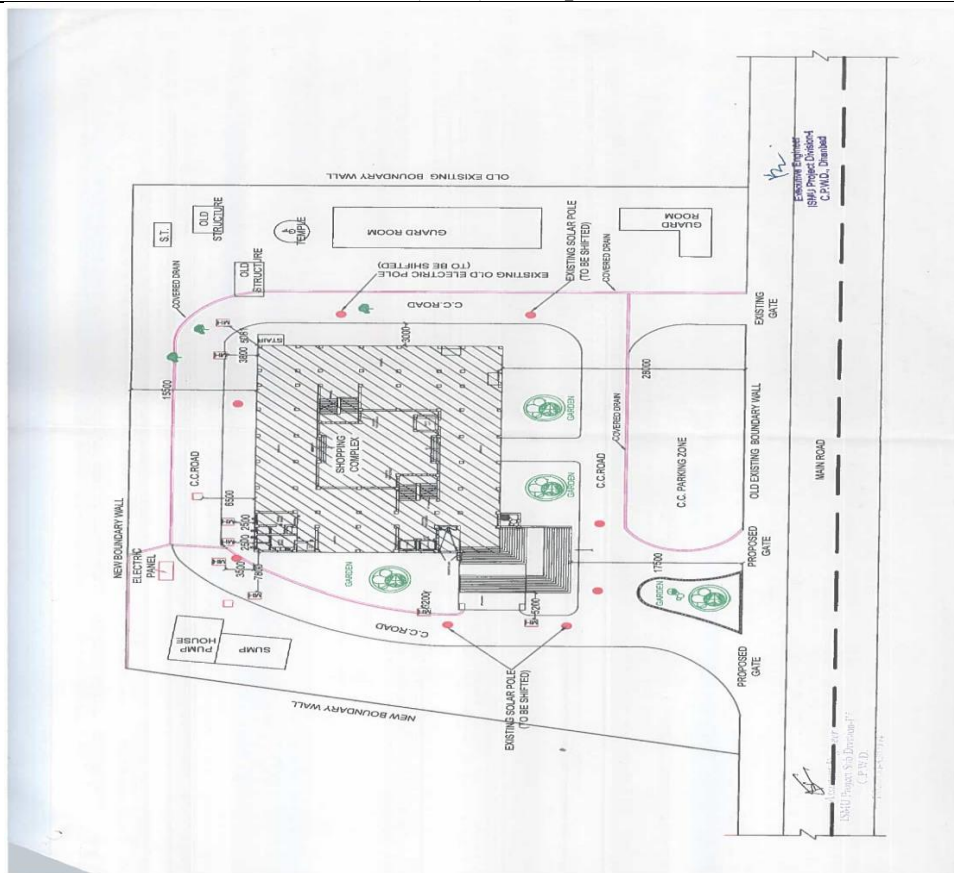
Place:

Dated:

## SECTION 10 DRAWINGS

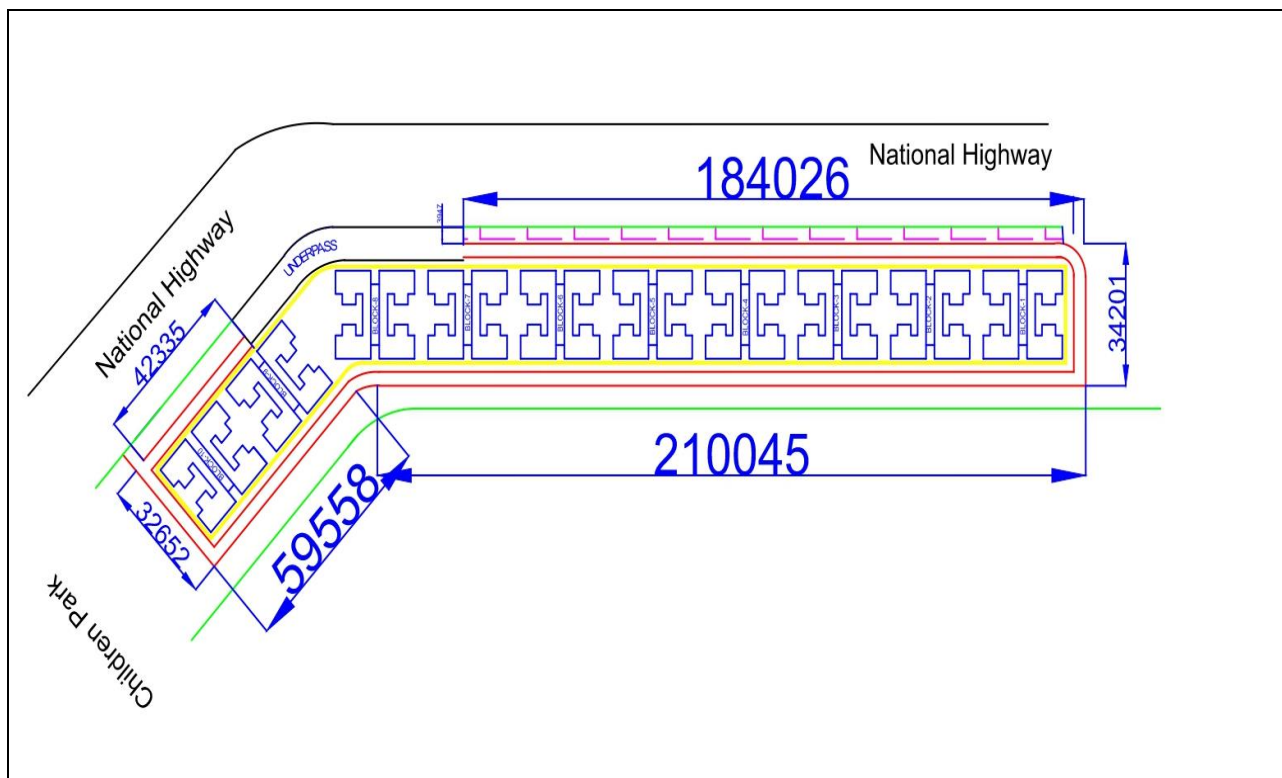


IIT(ISM) Campus

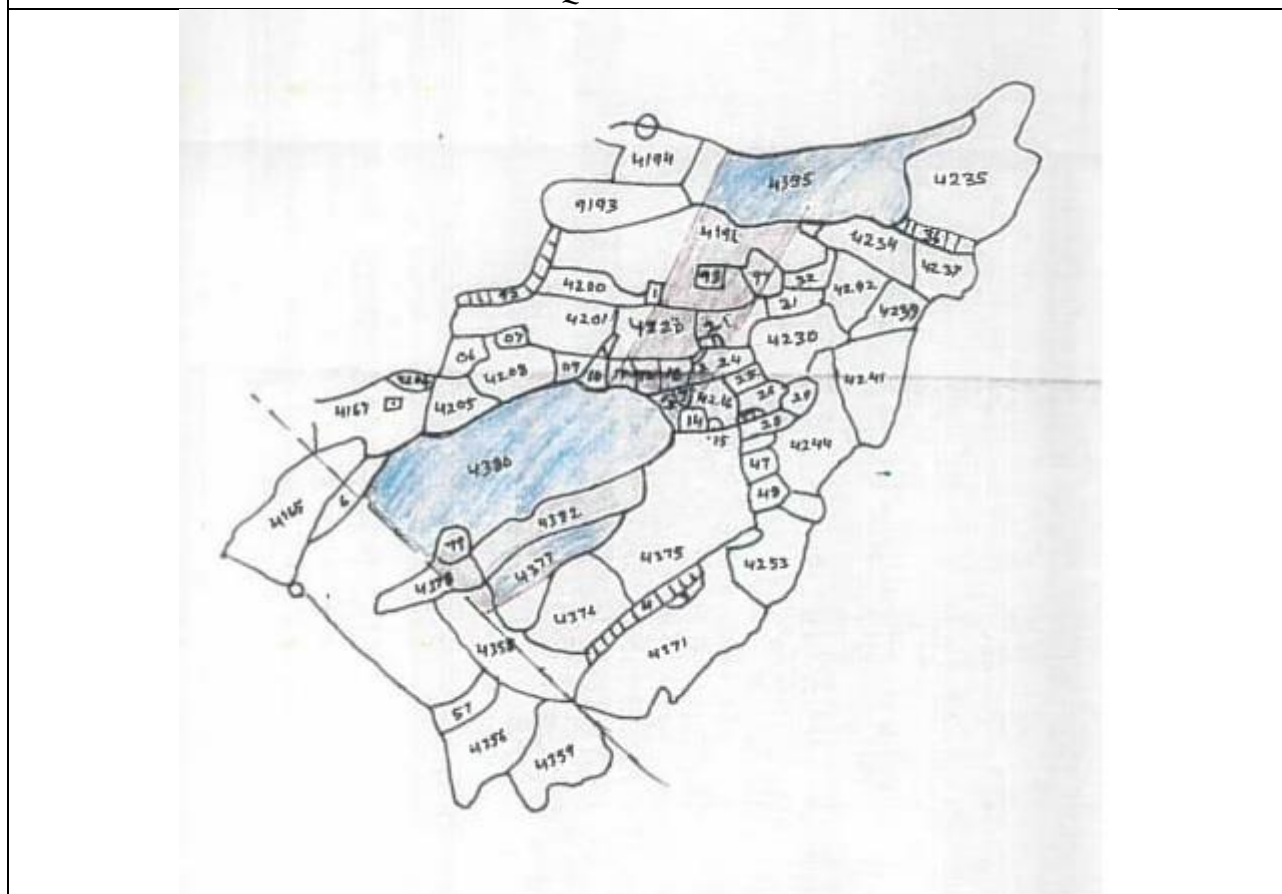


Multipurpose Complex





150 Quarter Premises



Lahbani, Dhaiya