

**INDIAN INSTITUTE OF ASTROPHYSICS  
2ND BLOCK, KORAMANGALA, SARJAPUR ROAD,  
BANGALORE – 560034.**

## **TENDER DOCUMENT**

*Name of Work:* **PROJECT MANAGEMENT CONSULTANCY SERVICES (PMCS) FOR  
CONSTRUCTION OF MULTISTORIED BUILDING “SURYA” AT THE PREMISES OF  
INDIAN INSTITUTE OF ASTROPHYSICS CAMPUS, BANGALORE.**

Tender Notice No: **05/IIA/CIVIL/SURYA/ PMCS/2008-09**

**INDIAN INSTITUTE OF ASTROPHYSICS**

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INDIAN INSTITUTE OF ASTROPHYSICS

# INDIAN INSTITUTE OF ASTROPHYSICS

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## 1. INTRODUCTION:

The Campus in Bangalore is setup on a site of about 5 acres of land acquired from the City Improvement Trust Board, now known as Bangalore Development Authority in 1976. The present campus consists of a Main laboratory & Annex; Optics lab and annex; Mechanical lab, and Administrative block. When the institute decided to shift its laboratories from Kodaikanal to Bangalore in 1973-74, the Raman Research Institute hosted some scientists on its campus. At that time, a temporary building with ground floor and asbestos roof was set up, which even till today continues as the administrative Block.

There has been a long felt need to provide proper office accommodation for administrative staff, scientists, engineers, students, a full fledged state of the art library, conference center equipped with the state of the art audio/visual instruments, cafeteria along with basement parking, integrated PhD program, M .Tech in optics and other research programs and also for the proposed university office, administrative office, an Auditorium for 200 capacity, library space etc. Keeping this in view, in order to use the available space in an optimum manner, and considering the recent relaxations of the government of Karnataka with regard to floor area ratio, the prevailing high value for the land in Koramangala, a multi storied building, consisting of basement + ground + Five floors, is proposed. The new building will come up at the place where the temporary hutment, which houses the administrative block, constructed about three decades ago. The total area proposed to be built will be about 100,000 sqft. This building is expected to cost approximately Rs.20 crores, spread over three financial years.

Indian Institute Of Astrophysics, Bangalore, desires to appoint Project Management Consultancy Services (PMCS) for Various Functional/Facility Buildings at IIA/Bangalore Campus (viz. Civil, Plumbing, Electrical, Environmental, HVAC, Audio Visual Auditorium, Sound Insulation, Mechanical, landscaping etc.).

- 1. Type of structure :** The structure is a RCC framed structure consisting of beams, slabs and columns.
- 2. Roof height :** 3.35Mts.
- 3. No of floors :** Cellar, Ground and Five Upper floors.
- 4. Cellar :** Parking for 50 cars.
  - Ground Floor :** Auditorium to house – 200 no, canteen, seminar Hall, project office 1 and project office 2.
  - First Floor :** Auditorium, projector room, two class rooms, Registrar's office, University office.
  - Second Floor :** Administration office and scientist offices.

**Third Floor** : Laboratory space and scientists office.

**Fourth Floor** : Director Cabin, meeting room, computer center, lab space and Library.

**Fifth Floor** : Library space.

**5. Total Built Up Area** : About 1, 00,000 SQFT.

**6. Utility** : Two lifts and one service lift.  
Two staircases including one fire escape staircase.

**7. Period of completion** : Two years from the date of issue of work order for the construction

**Nature of building facilities.**

1. Laboratories, Canteen.
2. Office rooms.
3. Storage facilities.
4. Auditorium.
5. Rooms for Archives.
6. Services like water supply, sewerage, storm water disposal, Rain water harvesting etc.
7. Electrical works including internal electrification, street lighting, designing of Substations, smoke detection, compressed air, race ways, cable management system, etc.
8. A/ C works as required while designing the above facilities.
9. Mechanical works like cranes, lifts, large size doors, Horizontal/ Vertical sliding doors.



**INDIAN INSTITUTE OF ASTROPHYSICS**  
**2ND BLOCK, KORAMANGALA, SARJAPUR ROAD,**  
**BANGALORE-560 034**

**PUBLIC TENDER NOTICE NO:** 05/IIA/CIVIL/SURYA/PMCS/2008-09  
**DATED: 12.03.2009 (TWO BID SYSTEM)**

The Indian Institute of Astrophysics invites sealed tenders on behalf of The Director in “Two part” for appointment providing Project Management Consultancy (PMCS) services relating to Project Supervision and Quality Assurance, etc., for the construction of Proposed Multi storied building “SURYA” at the premises of Indian Institute of Astrophysics campus, Bangalore ,as detailed in the tender document.

Sl.No	Description in Brief	Type of consultancy contract	Cost of tender document	Contract period for consultancy
1	Project management consultancy services (PMCS) for carrying out supervision and rendering other services for construction of a Multi storied building “SURYA” at the premises of Indian Institute of Astrophysics campus, Bangalore.	Percentage on the actual cost	Rs 5000/-	Till completion of the project <b>(Construction contract period 24 months is envisaged)</b>

The Tender Document can be viewed and downloaded from our website [www.iiap.res.in/tenders.htm](http://www.iiap.res.in/tenders.htm). Hence the interested tenderers may at their option download the same from our website (as “NO” hard copies of Tender document is/are provided from this office) and submit their offers along with Tender fee , a pay order or Demand Draft of Rs. 5000/- ( Non refundable ) in favour of "The Director, Indian Institute of Astrophysics" payable at Bangalore. The bid shall have to be submitted duly filled and signed at the above mentioned address.

The Offers should be submitted in two sealed covers one super scribed “Technical Bid” and other “Price Bid”. Both covers shall be put in another sealed cover super scribing the envelope with “Tender for Project Management Consultancy services, Notice No. and due date”. The last date of submission of bid is **20.05.2009 on or before 3:00 pm**. The Technical bid will be opened at **3.30 pm**. on the same day in the presence of attending tenderers or their authorized representatives.

After opening of Technical bid, the capability and suitability of the bidders shall be evaluated and Price bid of the qualified bidders shall only be opened in the presence of the attending bidders. The date of opening of Price bid will be informed to the qualified bidders.

**Following are the Qualifying Criteria:**

- 1) The Firm / Company should have full fledged establishment /office in Bangalore or should be able to setup the same in Bangalore with facilities like telephone, Computers, Printers, Fax, e-mail facilities & Software's like MS Office, MS Project, AutoCAD etc.
- 2) The Firm / Company should have a minimum of 5 Years standing i.e. established at Least on or before 1-1-2004. Joint ventures are not acceptable.
- 3) The Firm / Company should have rendered services pertaining to construction Management & Supervision for Civil, Electrical, HVAC, Interior & Mechanical Works for Government / Semi Government/Reputed corporate clients. (The intending Bidders shall furnish the relevant experience certificates duly signed by the competent Authority not less than the rank of Executive Engineer).
- 4) Should have rendered PMC Services for at least one project costing not less than Rs.15 Crores including Civil, Electrical, HVAC, Mechanical & Interior including audio visual (for auditorium) during pervious 5 Years for Government / Semi Government/Reputed corporate clients.

**Or**

Three similar works each costing not less than Rs 6 Crores including Civil, Electrical, HVAC, Mechanical & Interior including audio visual (for auditorium) during previous five Years for Government / Semi Government/Reputed corporate clients.

- 5) The tenderers should submit latest Audited Balance Sheet duly certified by the Chartered Accountant. The latest TDS Certificate indicating the Income Tax deducted by the client for the execution of similar works.

The Director, IIA reserves the right to accept or reject any or all tenders without assigning any reason thereof.

**Administrative officer (Ag)**

**For Director**

### **3. INSTRUCTIONS TO THE TENDERERS**

1. The tenderers should submit the entire documents (Technical bid and Price Bid) with all the pages of document duly signed.
2. The Offers should be submitted in two sealed covers one super scribed “Technical Bid” and other “Price Bid”. Both covers shall be put in another sealed cover super scribing the envelope with “Tender for Project Management Consultancy services, Notice No. and due date”.
3. If any clarification is required should be obtained before filling Tender Document.
4. If any discrepancy is there between figures and words for quoted percentage, the lower of the two will be considered for the purpose of evaluation.
5. The tenderers who do not fulfill all or any of the tender conditions or if the tender is incomplete in any respect, will be summarily rejected.
6. The Institute is not bound to accept the lowest tender.
7. Even though the tenderers meet the above criteria, they are subject to be disqualified if they have (The Institute reserves the right to verify the particulars furnished by the tenderers.)
  - Made misleading or false representations in the forms, statements and attachments submitted in proof of the qualification requirement, Conditional bid / proposal: and / or
  - Record of poor performance such as abandoning the works, not properly completing the contract, inordinate delays in completion, litigation history, or financial failures etc.
8. Any effort by the PMCS to influence the client in the bid evaluation, bid comparison or contract award decision results in rejection of the PMCS bid.
9. Incomplete Technical Bids are liable for rejection. Commercial/price bids will be considered for opening only for the Qualified Technical Bidders, which are recommended by the Technical evaluation committees being constituted for the purpose.
10. Late & / delayed offer will not be considered at all.
11. IIA is not responsible for any delay / loss of documents in transit.
12. No bids will be considered if prescribed Tender Fee is not found with Technical bids (Part I).

**13. The Pre-Bid meeting will be held at the above address on 06.05.2009. Intending Bidders can participate in the pre-Bid meeting for any clarifications.**

14. All overwriting and corrections shall be duly attested.

15. Corrigendum's / modifications / corrections, if any, will be published in the website only.

16. The Director, Indian Institute of Astrophysics reserves the right to accept or reject the tenders in full or part without assigning any reason thereof.

## **DEFINITIONS**

CONSULTANT means

The firm that applies for Appointment/ the one retained for consultancy.

EMPLOYER means

Indian Institute Of Astrophysics, Bangalore represented by The Director, or any authorized representative by The Director.



## **4. SCOPE OF WORK**

The various activities broadly involved in the above said services are:

### **4.1. Planning and Co-ordination**

- 4.1.1 Planning, scheduling and implementing construction programs to complete the project in time. 'Submission and updating of PERT chart'.
- 4.1.2. The PMCS shall study and scrutinize the drawings submitted by the Architect and those from the builder and point out discrepancies, if any, and submit its views to the Officer designated by the institute and also to ensure incorporation. PMCS shall coordinate the tasks with the architect, builder and agencies engaged in providing various services.
- 4.1.3 Documentation of all project related matters, including minutes of different meetings and circulation of such records.
- 4.1.4 Preparation of periodic reports relating to time, cost and quality including verification of bills.
- 4.1.5 Ensure that the Institute and the Contractor abide by the Conditions of Contract.
- 4.1.6 PMCS should give the quarterly Budget requirement forecast over the whole project period at the beginning and updated every quarter.
- 4.1.7 Prepare drawing schedule and follow up with the concerned Officer designated by the institute / architects / service providers appointed by the institute for all schedules and related matters.
- 4.1.8 Check the adequacy of drawings and details.
- 4.1.9 Prepare specifications, contract documents and deliverables.
- 4.1.10 Do verification of the project cost estimates prepared by the architect.
- 4.1.11 The institute will call for tenders for the construction of building inclusive of all facilities and amenities. The PMCS shall also assist in the preparation of the comparative statement of the offers received from building firms. Assist the institute in identifying the contractor.
- 4.1.12 Conduct technical and commercial discussions in the presence of authorized representatives of the institute and PMCS.

- 4.1.13 Prepare contract documents for execution and also Submit tender evaluation report.
- 4.1.14 PMCS shall ensure that the IIA and the builder have taken all the permissions and clearances from the local authorities and departments required for taking up the construction of the building.
- 4.1.15 PMCS shall work out the milestone penalty to be imposed and penalty to be waived in case the slippage is made up subsequently.
- 4.1.16 The PMCS shall ensure that the builder shall comply with all the rules and regulations which are under force such as facilities to the workers both male and female including insurance, medical facilities etc

## **4.2. Construction Supervision**

- 4.2.1 Shall Study all drawings, Contract Agreement, Specifications etc. and ensure implementation at site.
- 4.2.2 Shall physically verify all dimensions of site and ensure that they are as per drawings. Discrepancies shall be notified to Institute immediately. Shall be responsible to maintain the dimension at site as per the drawing.
- 4.2.3 Will be responsible for overall monitoring of the construction works and should be available at site EVERYDAY (including nights if the contractor carries out work in shifts to achieve the project completion schedule) for supervision & coordination of site work with the Institute and Contractors.
- 4.2.4 Will ensure deployment of requisite number of qualified and experienced Engineers (Civil, PH and Electrical, HVAC) at site on full time basis to supervise the day to day works and also shall be responsible for monitoring of the progress of work as per approved drawings, construction procedures and practices and to ensure quality in day to day work as per specifications and standards.
- 4.2.5 Shall be responsible to maintain the records of day-to-day works
- 4.2.6 Shall be responsible for checking the levels, steel reinforcement, centering, shuttering and scaffolding, etc.
- 4.2.7 Shall be responsible to supervise the day to day works like earth work, PCC, RCC, brick masonry, joinery, floorings and all Civil, PH and Electrical works (Internal and External), HVAC and all other items as stipulated in the bill of quantities in Agreement with contractors.
- 4.2.8 Checking all the measurements recorded in the bill prepared by contractor at site with respect to approved drawings and to certify the accuracy. If in

case, it is necessary to take measurements at site and record and finalize the bills, the PMCS shall also do so to make timely payment for the works done.

- 4.2.9 (a) The PMCS shall verify the progressive bills submitted by the builder with reference to the work carried out on the project. Hundred percent verification of the quantum of work done shall be carried out before recommending for passing the bill and making payment. The institute representative shall be present while taking such measurement. The PMCS shall certify the accuracy within three to four days from the date of receipt of bill from contractor / by the Officer designated by the institute. Minimum ten percent of such measurements will be checked by Officer designated by the Institute.
- (b) For bills / measurements not submitted by the contractor, the PMCS shall take measurements jointly with contractor's representative, record them in measurement books (MBs) supplied by Institute and obtain contractor's Signature in token of acceptance & Prepare Bills. Care shall be taken to take timely measurement of such items which may get embedded or hidden measurements and not susceptible for measurement at a later date, which cannot be recorded in future shall be recorded before covering up the work. Minimum ten percent of such measurements will be checked by Officer designated by the Institute.
- (c) If contractor's representative fails to attend at the measurements or Contractor fails to countersign after giving reasonable notice to the contractor, PMCS should take measurements and prepare bills and send for payment. Minimum ten percent of such measurements will be got checked by Officer designated by the Institute.
- 4.2.10 On completion of work, the PMCS shall have the responsibility to finalize the final bills for the work as per actual execution.
- 4.2.11 The PMCS should settle the Final Bill within six months after completion of Project
- 4.2.12 Shall be responsible to maintain the day to day consumption of cement for the work at site and shall see that the cement used in work is as per the theoretical requirement.
- 4.2.13 Shall be responsible for completion of project as per scheduled time stipulated in agreement with the contractors.
- 4.2.14 Shall preserve field books and measurement books supplied by Institute in safe custody and shall return the same to Institute after completion of project or as advised by Institute.

- 4.2.15 Shall maintain cement register, steel register, daily labor register, drawing register, hindrance register, register for payment of advances and recoveries, register for reconciliation of materials to facilitate recoveries, register for movement of field books / measurement books, site instructions book, diary of work, Quality Assurance (QA) records, etc., and any other register as advised by Institute and shall return all registers referred above after completion of the project or as advised by Institute.
- 4.2.16 Shall ensure that contractors have complied with registration under Contract Labor (Regulation and Abolition) Act, 1970 and Central Rules, 1971 and abide by laws pertaining to labor including payment as per Minimum Wages Act and any other Act or enactment relating thereto and rules framed there under from time to time. The PMCS shall ensure compliance by the contractors of all labor laws and relevant Statutory Acts including Labour License, Minimum Wages Act, etc.
- 4.2.17 Shall ensure that contractors have taken requisite “All Risk Insurance Policies” to cover workman under Workman Compensation Act, loss / damage caused by natural calamities / accident / accidental collapse of partially completed work, materials and plant at site and for third party claims for injury / damages. PMCS shall ensure that all such policies remain in force through out the execution of project.
- 4.2.18 Shall ensure that all instructions to the contractors are issued in writing to the contractor. PMCS shall maintain the record of all such instructions for verification at any time. It will be PMCS responsibility to regularize all verbal instructions given by competent authority in unavoidable circumstances by obtaining written confirmations/ratifications. PMCS shall ensure that extra/deviated items are not executed unless approved by Institute and rates are finalized. A register for extra/substituted items shall be maintained by PMCS.
- 4.2.19 Shall ensure safety of structure by taking all necessary precautions and by not allowing excessive construction loads such as dumping of excessive materials, overcrowding on floors and shall avoid such other factors which will endanger the safety of structure during construction.
- 4.2.20 Shall take custody of objects of value and antiquity found on site during excavation or otherwise and hand over to Institute official.
- 4.2.21 Shall keep a track of permissions required from local authorities and get revalidated whenever necessary.
- 4.2.22 Shall ensure that safety of personnel working at site/inspecting the site by taking precautions by putting barricades, night lamps, near trenches, pits, open shafts, lift shafts, edge of floors, terraces and such other places and to

insist on compliance of safety code such as use of helmets, etc, on work site.

- 4.2.23 The PMCS shall make their own arrangements at no extra cost to the Institute for instruments/equipments such as theodolites, leveling instruments, prismatic compass, chain, measuring tapes, plain tables and ranging rods, such other equipments / instruments including tents for shelter for the staff of PMCS, etc.
- 4.2.24 Suggest modification, if any, due to site conditions and advice reasoned justification of cost variations on account of resultant extra items and excess supported by proper analysis.
- 4.2.25 The PMCS shall see that advance action is taken by the builder to make suitable provisions for inserts during construction of civil works for various services like electricity, air conditioning, water supply, sewage system ventilation etc.
- 4.2.26 If the work done by the builder is found to not satisfactory, PMCS can instruct the builder to suspend the work intimating at the same time about the suspension of work to the officer designated by the Institute. The work can be resumed only with the approval of the officer designated by the Institute.
- 4.2.27 Prepare necessary snag list after virtual completion of work.

### **4.3. Quality Control**

- 4.3.1 Submission of Detailed schedules technical formats for inspection and testing of materials, indicating the test/inspections procedures and applicable acceptance limits at works/test house and site for materials and equipment well in advance and got approved by the employer. Monitor the quality of the work and control the quality as per specification, relevant codes and as per sound engineering practices.
- 4.3.2 Maintain the registers for mandatory tests to be conducted for all materials before incorporation in work. The guidelines may be taken from the officer designated by the Institute regarding the registers to be maintained.
- 4.3.3 Inspect and approve the materials at site as per specifications before they are used in work.
- 4.3.4 Shall be responsible for obtaining good workmanship with respect to lines, levels, plumb, finish, etc. Shall check all centerlines, dimensions, levels and plumb at all stages of work with reference to working drawings and shall ensure correct dimensions of all elements.

- 4.3.5 Shall ensure that work proceeds as per tender conditions and specifications. All material brought to site shall be of approved quality and make, rejected material is removed from site and work executed is of high standard, good workmanship and desired quality. PMCS shall also submit weekly reports of materials used. Any compromise of quality in materials or workmanship shall be brought to the notice of the officer designated by the Institute in writing for taking necessary action. PMCS shall also bring to the notice of the Institute any slippage in the progress of work as per schedule and any likely slippage due to constraints like short supply of construction materials, labor problems, non availability of drawings.etc.
- 4.3.6 Inspection and certification of equipment at manufacturer's works for HVAC, Electrical, Communication, Fire fighting systems or any other equipment will be planned in coordination with the officer designated by the Institute who may depute his representative for the inspection.

#### **4.4. Site co-ordination**

- 4.4.1 Shall attend periodic site meetings / meetings in Institute office and discuss site conditions bottlenecks faced likely hindrances, time overruns, cost overruns and any other important matter along with solutions proposed. PMCS will be required to submit periodic reports concerning quality standard and progress of the project.
- 4.4.2 To co-ordinate between the Institute and Contractors in all matters relating to obtaining construction drawings from Architect & instructions etc.
- 4.4.3 To arrange issue of preliminary completion report, defect liability completion report, final job completion report by the officer designated by the Institute.
- 4.4.4 Any other construction management task not specifically mentioned but relevant to the realization of the project.
- 4.4.5 Shall help Institute in settling all the bills of all agencies.
- 4.4.6 The PMCS shall in accordance with and as required by the terms of Agreement or agreements entered or to be entered into between Institute on one part, and the contractor or contractors on the other part certify after the verification that the work measured and stipulation in the specifications, drawings and Bill of Quantities prescribed in the contract agreement entered into with the contractor(s) are in order. In the matter of approving such bills, the PMCS shall conform adherence to the rules and instructions issued by Institute and intimate to the Institute, guarantee and correctness of all such certificates and shall hold themselves responsible

for the correctness of all bills and certificates issued, scrutinized or checked by them, as to the quality of the work concerned as well as the quantities of various items of works. Before certifying any bill PMCS shall ensure that the work being certified is, in general in accordance with the designs.

- 4.4.7 Shall check periodically the quantities recorded for various items and keep watch on excess / shortage. PMCS shall account for all variations in tender quantities with respect to execution drawings and submit a report. PMCS shall assess impact of excessive quantities on the cost of project and wherever felt necessary by Institute, prepare a Running Summary of Cost for perusal of Institute. PMCS shall obtain approval from Institute if the quantities put to tender are likely to exceed by 10% prior to giving green signal to contractor to go ahead with the work
- 4.4.8 Shall prepare “Running Summary of Cost” for the project once in six months or as desired by Institute and ensure that there will be no cost overrun. PMCS shall help Institute in preparing a note of revised sanction for the project.

PMCS shall ensure that following are not recommended for payment in interim bills / final bills.

- I) Extra items / deviated items not approved by Institute.
- ii) Payments beyond financial sanction and
- iii) Payment for the work done in extended period without sanction for the time extension.

- 4.4.9 Shall co-ordinate with all agencies working at site, liaison with local authorities /government agencies for proper permissions / commencement certificate / completion certificate, etc.
- 4.4.10 Shall ensure that work proceeds smoothly and not hampered for want of decisions / drawings / clarifications.
- 4.4.11 Shall submit physical and financial progress reports once every month or as desired by Institute in standard proforma approved by Institute.
- 4.4.12 Shall anticipate time overruns, well before completion date and obtain requests for extensions from contractors. PMCS shall submit contractor’s request for extension of time along with his recommendations well within time. Bill for work done in extended time, yet to be sanctioned, shall not be recommended. PMCS will note that only competent authority in Institute namely officer designated by the Institute/ Project Engineer /Project Administrator / Dean / Director of Institute only have authority to grant permissions for extensions.

- 4.4.13 Shall advise Institute with regard to extra claims / disputes / Chief Technical Examiner's observations / arbitration cases between Institute and the Contractors, if any and assist Institute in case of any dispute till the cases are resolved either by mutual negotiation or through arbitration or court, as the case may be.
- 4.4.14 Shall suggest modifications, if any, due to site conditions and advise reasoned justification of cost variations on account of resultant extra items and excess supported by proper analysis.
- 4.4.15 To forecast issues ahead in time that would delay the project and caution clients for appropriate action.
- 4.4.16 To provide value engineering service that will result in economical and quality end product.
- 4.4.17 Commissioning

The PMCS shall submit detailed schedule for commissioning of the various subsystems, equipment and the whole integrated facility, in consultation with the employer. This schedule will cover the checks/tests/inspection proposed, and the target dates for completion.

After commissioning the entire facility, a commissioning report containing (i) salient specifications of materials/equipment/systems along with applicable standards (ii) Reports of inspection/testing carried at works and test houses (iii) Results of site tests (iv) Defects noticed and rectified during commissioning and (v) warranty details of equipment and systems.

## **5. PMCS's responsibility after completion of project and defects liability Period**

- 5.1 PMCS shall carry out detailed inspection on completion of project and get rectified all defects noticed during inspection. PMCS shall also carry out detailed inspection during defects liability period and get rectified all defects noticed during such inspection before the end of defects liability period.
- 5.2 PMCS shall advise Institute with regards to extra claims or disputes / arbitration cases between Institute and the contractor/s, if any, and assist in case of any dispute till the cases are resolved either by mutual negotiation or through Arbitration or Court as the case may be.
- 5.3 PMCS should collect the Guarantee Bond for Water Proofing & Anti Termite Treatment and as built drawings and it should be handed over to the Institute.



- 5.4 Defect Liability period shall be one year after the completion or shall pass one rainy season whichever is later.

## **6. Other terms and Conditions**

- 6.1 PMCS is expected to ensure that men of proven ability and adequately qualified are only employed at site and they work diligently. In case, Institute finds any Engineer/s not up to the mark, PMCS will have to withdraw him / them from site and replace him / them by posting new one/s in his / their position. Institute reserves the right to remove such personnel and ask for a substitute of required caliber. In case an Engineer/s resigns from their employment, PMCS shall immediately provide a substitute of equivalent caliber. PMCS shall not make any changes in the personnel deployed by them on work site without prior permission.
- 6.2 The PMCS shall furnish the list of Engineers and Supervisors (Civil and Electrical) with details of their qualifications, experience, etc., to the Institute.
- 6.3 The Institute undertakes no responsibility in respect of any life, health, accident, travel and any other insurance for the personnel deployed by PMCS.
- 6.4 The PMCS shall be responsible for any damage or loss on account of neglect of professional duty or conduct on the part of such staff or Engineers or others. To this effect, the PMCS shall indemnify Institute.
- 6.5 The PMCS shall not have any objection to Institute maintaining any Engineering staff at its own cost at the site of work to carry out work and duties allotted to them by Institute, in respect of all the work at site or other areas outside the scope of PMCS works for overall surveillance, security and verification.
- 6.6 PMCS shall provide manpower at site timely and only experienced persons will be provided at site.
- 6.6.1 It will be compulsory for PMCS to place following full-time qualified adequate Engineers on site through out the execution of work. One Resident Engineer (Civil) (Senior Engineer) Civil Engineering Graduate having 5 to 7 years experience and Two Junior Engineer civil (Jr. E), Diploma in Civil Engineering holder will be with 3 to 5 years experience in building construction industry. One Common Senior Engineer Services. Graduate Engineer with knowledge of all the utilities and Services & one full time Diploma for Electrical / communication, Audio Visual /

HVAC with sufficient practical experience. Prior to posting these personnel to work site / office, PMCS shall submit their Bio-data and obtain approval of Institute. The deployment of staff for this project shall be as below.

Resident Engineers (RE) (one) ( CIVIL )	One full time (Senior Engineer) CIVIL Graduate having minimum 5 to 7 Years practical Experience.
Junior Engineers (Jr. E) ( CIVIL) (Two)	Two full time Diploma CIVIL holder with 3 to 5 years minimum practical Experience.
Electrical / Communication, Audio visual / HVAC One Senior Engineer (services) Common One Junior Engineer (Electrical & HVAC)	One Common Senior Engineer Services. Graduate Engineer with knowledge of all the utilities and Services & one full time Diploma for Electrical / communication, Audio Visual / HVAC with sufficient practical experience.

6.6.2 The above requirement is the visualized minimum. However, more Engineers and other categories of staff may have to be appointed, if necessary, for satisfactory supervision and co-ordination, it is specifically agreed that the Institute shall have no responsibility for any Staff / Officers / Engineers engaged by the PMCS and the said PMCS alone shall be responsible as Employer.

## 7. Professional Misconduct

If at any time, it is noticed that deliberate attempt has been made by the PMCS to cause over payments to the contractors by over-measurement or over estimation of rates or sub-standard work is accepted and recommended for payment, the amount shall be recovered from the payment due to the PMCS not only from this contract but also from any other contract awarded by this Institute. The matter will be viewed as a professional misconduct and strict action as per the laws of country will be taken and recoveries shall be made from PMCS.

## 8. Sub-letting of professional services

No sub-letting of services shall be permitted by the Institute. Under no circumstances the PMCS shall sublet the services.

## **9. Third Party Liability**

The Institute shall not be liable for any injury / death, caused to any official, employee, representative or agent of the PMCS or their consultants working at the site or damage to their properties for any reason whatsoever and Institute shall not entertain any claim from any person on that behalf. It would be the responsibility of the PMCS to get their officials, employees, representatives, agents or their consultants insured against the possible risks involved in the discharge of their duties at the work site.

## **10. Confidentiality**

Except with the prior written consent by the Institute, the PMCS and their representatives shall not any time communicate to any person or entity any confidential information disclosed to them for the purpose of the services. The PMCS shall not publicize any information pertaining to Institute which is discussed with them during course of execution of work in the interest of project completion.

## **11. Extension of Time**

If the PMCS desires an extension of time for the completion of the work on the grounds of PMCS having been unavoidably hindered in its execution or any other ground, PMCS shall apply in writing to the Director/officer designated by the Institute within 30 days of the date of the hindrance on account of which PMCS desires such extensions as aforesaid and the Director/officer designated by the Institute shall, if in his opinion reasonable (Which shall be final) there after authorize such extension of time, if any, as may in his opinion be necessary or proper.

## **12. Exclusions:**

All exclusions if any not included in the scope of work should be spelt out in the offer which will be subjected to review by the institute.

## **13. FEES AND TERMS OF PAYMENT**

The Institute hereby agrees to pay the PMCS the following remuneration for their services as under,

- a) i) Fees quoted by them and accepted by the Institute which shall be percentage of

completion cost of final bill value of work (Civil, PH, Electrical works, HVAC, etc) for which they have rendered Project Management Consultancy services as said above. The final bill value does not include cost of land, payment made to the statutory bodies, PMCS fees, etc., However the running payments shall be based on work done value in the particular month by the contractors, to be adjusted after completion of work.

- ii) The Value of the portion / part of the work already completed on the day of issue of letter of intent / work order to PMCS shall be worked out by the officer designated by the Institute, as per the bills paid to the contractor falling under the scope of this contract and same will be reduced from the completion cost for calculating the actual fees to be paid to PMCS.
- iii) It will be the responsibility of PMCS to finalize all formalities/ paper work like preparation / settlement of final bills , extra / substituted items, AHR / ALR items, handing over / taking over notes, getting rectifications carried out , etc after completion of the work. The PMCS should complete the above within a reasonable time of 3 months by deploying required number of Engineers **and no separate payment shall be made to the PMCS for the above activities.**
- iv) The PMCS shall furnish break up details for their offer clearly indicating the number of Engineers, their grade, salaries, profit and overheads, etc: considered in their offer.
- v) The PMCS should ensure minimum number of Engineers as stipulated are engaged throughout the period of PMCS. However if due to any reason, less number of Engineers are deployed, suitable reduction on pro-rata basis shall be effected from the bills payable to PMCS and decision of Director/officer designated by the Institute regarding this shall be final and binding on the PMCS.
- b) Payment in Monthly installment - 80% of fees payable, worked out based on Work done value in the particular month by Contractors.
- c) On completion of Work - 10% of fees.  
(i.e., after finalization of final bills of construction contractors)
- d) On completion of rectifications - Balance 10% of fees.  
(Arising out of inspection for handing over / taking over & facility handing over to Users and completion of defect liability period).
- e) **Service Tax:** Agency to confirm applicability of Service Tax.
- f) **Income Tax:** Tax will be deducted at source as applicable.

The above professional fees is inclusive of all taxes excluding service tax / professional tax which will be reimbursed as per actual. PMCS will be required to submit their Service

Tax Nos. No extra claims or any other taxes and statutory payments if any shall be allowed by the Institute.

### **Payment beyond stipulated time**

Completion time of the project shall be as indicated in agreement entered into by the Institute with the building contractors. In case work gets delayed and cause of the delay is not attributable to the performance of PMCS and thus it would be totally beyond the control of PMCS, the PMCS will be paid on monthly basis as per the following formula for its staff posted at the site after scheduled completion period for the extended period of contract only.

$$\text{Monthly payment to PMCS} = \frac{60\% \text{ of total professional fees payable}}{\text{Original scheduled contract period for the project in months as stipulated in the letter of intent / work order.}}$$

The above payment shall be made only if all the Engineers deployed during the course of the original contract are retained. In case less numbers of Engineers are deployed either due to reduced requirement of balance works or due to instructions of institute or due to any other reasons, reduction shall be effected from the payment on pro-rate basis. However, Institute reserves the right to extend the PMCS or close the contract and the PMCS is bound by the decision of the institute. The institute also reserves the right for reduction in the number of Engineers to be deployed and decision of the institute shall be final and binding on the PMCS.

### **Liquidated Damages Clause**

If any delay in execution of the works is attributable to the acts of omissions and commissions and poor management of PMCS, Institute shall be entitled to recover liquidated damages at the rate of 0.5% of the total fees per week of delay limited to maximum of 10% of the total actual fees payable.

## **14. PMCS OFFICE AND TELEPHONE FACILITY**

An office space of 4 M x 3 M (12 Sqm area) shall be provided by Indian Institute of Astrophysics at Site. PMCS shall make their own arrangements facilities for their staff, furniture, telephone / fan, Computer, e-mail facility, Fax etc. The PMCS at their cost will install PCs with requisite softwares for Project management on site. Electricity for Lights, Fan, PC. Etc. for the site office will have to be arranged by PMCS.

It shall be open to the Institute to abandon or give up at any stage of the construction of any of the site buildings or any part thereof. In the event of such abandonment or giving up or in the event of termination of the agreement, the PMCS shall be paid fees up to duration worked by them.

## **Termination of Contract**

If the PMCS fails to perform any of its obligations under this agreement or if Institute is dissatisfied with the services of the PMCS, Institute may issue seven days written notice intimating the PMCS of their failures or deficiencies and calling upon PMCS to rectify within such time as may be specified in the notice and if the PMCS fails to perform such obligation or make good such deficiencies as pointed out to the PMCS in the notice, Institute may terminate the services of PMCS under this agreement.

Institute may also terminate the PMCS's services hereunder:

- i) If the firm is adjudged a bankrupt or
- ii) If the firm make a general assignment for the benefit of their creditors or
- iii) If a receiver is appointed on account of their insolvency or
- iv) They disregard law, ordinances, rules, regulations or orders of any public authority having jurisdiction on the works.
- v) If PMCS commits breach of any of the terms and condition of this contract.

The termination shall be without prejudice to all rights, liabilities and remedies that have arisen or accrued till date of such termination or that may arise on account of such termination and Institute may get the project completed by whatever method they may deem expedient. In such case, the PMCS shall not be entitled to receive any further payment, if due, until the loss damage or expense incurred by Institute due to breach of this agreement by PMCS have been settled by them.

In case the PMCS abandons the work during the course of the project, the Institute has the right to appoint an alternate PMCS or make an arrangement for carrying out the work of PMCS, at the risk and cost of the PMCS.

Traveling / daily allowances shall not be payable to the PMCS, its representatives, officials and consultants engaged by it for their visit to construction site, offices of local authorities, Employer's office or any other place in Bangalore.

In case the Resident Engineer / Senior Engineer employed by the PMCS are required to travel to any other station outside work station, in connection with the discharge of the duties relating to project, PMCS shall get his tour program and mode of travel approved by employer and will be paid actual fair charges to

and fro, incidentals in the form of actual for conveyance used, stay in reasonably good hotel, and daily allowance of **Rs.400/-** subject to production of document in proof of expenditure. However, prior approval from employer shall be obtained for any such tours without which such payment will not be reimbursed.

The scope of work broadly described herein and assigned to PMCS, as their area of responsibility is inclusive of all consultancy and other services required in connection with the completion of work whether specifically mentioned herein or not and rendering such consultancy services will not entitle the PMCS to charge any additional fees in as much as the same are included in the overall professional fees payable to them.

## **15. Professional Indemnity**

PMCS warrant that it shall exercise high degree of care and diligence in rendering the services pursuant to this agreement and that such services shall be of a high quality and standard satisfactory to Institute. The PMCS shall indemnify Institute from any damage or loss arising from such lack of care and diligence or arising out of any unsatisfactory performance of service by PMCS. For this purpose, PMCS shall subscribe to a professional liability insurance policy with a nationalized insurance company for an amount equivalent to 20% of the total fee payable by Institute to the PMCS. PMCS shall provide adequate evidence to Institute, if asked for, showing that such insurance has been taken and being maintained and that all the premium thereon have been paid.

## **16. DISPUTE SETTLEMENT**

1. In case of any dispute or difference arising between the parties during the progress of or after construction or abandonment of the work as to the meaning of construction of this contract or touching or relating either to the said buildings or works, or to any other matter or thing arising directly or indirectly under this contract, then and in such an event the same shall be referred to THE DIRECTOR INDIAN INSTITUTE OF ASTROPHYSICS who shall alone consider and determine the same, whose decision / award shall be binding and conclusive upon both the said parties and this clause shall be deemed a submission within the meaning of Arbitration and Conciliation Act 1996 or statutory modification or re-enactment there of.
2. It is specifically agreed that the PMCS shall continue to render its services provided herein with all due diligence, professional skill and tact notwithstanding

that any matter, question or dispute has been referred to the Director for his decision.

3. It is further agreed between the parties that the decision of the Director IIA on all matters of dispute is final and binding and questionable only in the court of law hereto that the Bangalore Courts alone shall have the exclusive jurisdiction.

Signature of the authorized  
Person with seal of the firm  
Date:



**INDIAN INSTITUTE OF ASTROPHYSICS  
2ND BLOCK, KORAMANGALA, SARJAPUR ROAD,  
BANGALORE – 560034.**

## **TECHNICAL BID**

**Name of Work: PROJECT MANAGEMENT CONSULTANCY SERVICES (PMCS)  
FOR CONSTRUCTION OF MULTISTORIED BUILDING “SURYA” AT THE  
PREMISES OF  
INDIAN INSTITUTE OF ASTROPHYSICS CAMPUS, BANGALORE.**

Tender Notice No: **05/IIA/CIVIL/SURYA/ /PMCS/2008-09**

Name of  
The Firm: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Phone No: \_\_\_\_\_

Last Date for Submission: **20- 05- 2009 up to 3:00 PM.**

**APPOINTMENT OF PROJECT MANAGEMENT CONSULTANCY SERVICES  
(PMCS) FOR CONSTRUCTION OF MULTISTORIED BUILDING“SURYA” AT  
THE PREMISES OF INDIAN INSTITUTE OF ASTROPHYSICS CAMPUS,  
BANGALORE.**

**FORMAT FOR SUBMISSION OF TECHNICAL & ORGANISATIONAL  
DETAILS.**

**NAME OF THE FIRM :**

**1. OFFICE SET UP OF THE FIRM**

1.1 Office Address : .....

.....

.....

1.2 Year of Establishment: .....

1.3 Contact Person Shri.....  
With Designation .....

Ph No.....

Fax No.....

E-mail.....

1.4 Details of Branch Offices if any: .....

1.5 Organizational setup of the firm  
Total staff strength both technical  
and Administration with their name, age  
qualification and experience : .....

1.5.1 Organizational chart enclosed or not

1.5.2 Details of the staff as per the following format.

Sl. No	Profession/discipline	Name	Age	Qualification	Experience (total years)	Field of experience
	Civil					
	Electrical					
	HVAC					
	Mechanical					
	Communication/com puter					
	Draftsmen					
	Others (engineering )					
	Accounts					

	Administration					
--	----------------	--	--	--	--	--

1.6 Details of office equipments:

1.7 Details of computerization in  
The office and softwares  
Adopted : .....

1.8 Company Profile : Public sector / Public Limited / Private  
Ltd / Partner ship Firm / any other.  
(Please furnish supporting documents)

1.9 Company Registration No : .....

2. Details of Sister Concerns : .....

3. Details of Works carried out and on hand for which they have provided services  
as Project Management Consultant in last five years with details such as name of work,  
year of completion, client name and address, cost of work, time period of construction,  
nature of work, etc., (It shall enclose a certificate from the owner that the service  
rendered by the firm has been satisfactory)

.....

4. Statutory approvals / certifications  
[Please Circle] : IBR / CCE / ISO

5. FINANCIAL

Bank Name: \_\_\_\_\_

Branch: \_\_\_\_\_

Account No.: \_\_\_\_\_

Average Annual Turnover for last 5 Years: \_\_\_\_\_

6. INSURANCE

Accident Insurance

Insured with: \_\_\_\_\_

Policy No.: \_\_\_\_\_

7. Details of Arbitration cases : .....
8. Any other detail you would like to intimate in support of your application for appointment : .....

Signature of the authorized  
Person with seal of the firm  
Date:

(Note: Attach separate sheet for furnishing information in case the space in the format is insufficient)

**INDIAN INSTITUTE OF ASTROPHYSICS  
2ND BLOCK, KORAMANGALA, SARJAPUR ROAD,  
BANGALORE – 560034.**

## **PRICE BID**

Name of Work: **APPOINTMENT OF PROJECT MANAGEMENT CONSULTANCY  
SERVICES (PMCS) FOR CONSTRUCTION  
OF MULTISTORIED BUILDING“SURYA” AT THE PREMISES OF  
INDIAN INSTITUTE OF ASTROPHYSICS CAMPUS, BANGALORE.**

Tender Notice No: **05/IIA/CIVIL/SURYA/ PMCS/2008-09**

Name of  
The Firm: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Phone No: \_\_\_\_\_

Last Date For Submission: **20-05-2009 up to 3:00 PM.**

Name of Work: **APPOINTMENT OF PROJECT MANAGEMENT CONSULTANCY SERVICES (PMCS) FOR CONSTRUCTION OF MULTISTORIED BUILDING“SURYA” AT THE PREMISES OF INDIAN INSTITUTE OF ASTROPHYSICS CAMPUS, BANGALORE.**

Tender Notice No: **05/IIA/CIVIL/SURYA/ PMCS/2008-09**

**Price bid**

**Note:** Appointment of PMCS Services is sought for the project for SURYA multistoried building at Indian Institute of Astrophysics, Koramangala, Bangalore. The approximate cost of Civil, Plumbing, Electrical, Mechanical, HVAC, Interior Works etc. **is Rs. 20 Crores** (Twenty Crores).The Completion period of entire project would be approximately **24 months**. Payments shall be made as detailed under FEES AND TERMS OF PAYMENT. The bidder shall quote his lowest price for carrying the tasks indicated in the SCOPE OF WORK.

Description	Professional fee for the Professional Services as in tender Document as a percentage of Completion cost as per final bill value of the project (In figures and words)
<p>Professional fees on the cost of the project, based on completion cost as per final bill value for the professional services to be rendered for Civil, Electrical, A/C, Mechanical, Interiors and allied works, etc for various projects/works as stipulated in the tender document enclosed herewith.</p> <p><b>Project/ Construction/ Project Management Consultant Services</b></p> <p>This includes Project Management Consultant Services for execution, of total project during the period of execution including all activities of planning for execution of work, scheduling, implementing construction programmes, coordinating with all concerned, documentation of related matters, preparation of periodical reports; supervision of all construction agencies at site; taking and recording measurements and preparation of bills of work as per CPWD works manual as also standard practices &amp; Agreement, executed by all agencies and recommending payments ensuring that construction agencies are duly following contractual, technical, quality,</p>	

safety, procedural and statutory requirements of the execution of Civil and allied works project contracts, including day to day work supervision, etc which mainly involves to provide all services to officer designated by the institute of Project to perform his duties for realization of project in time duly ensuring desired quality and performance of project etc complete more clearly indicated in the tender document enclosed complete.	
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Note: Fees shall be quoted on percentage basis only

Signature of the authorized  
Person with seal of the firm  
Date:

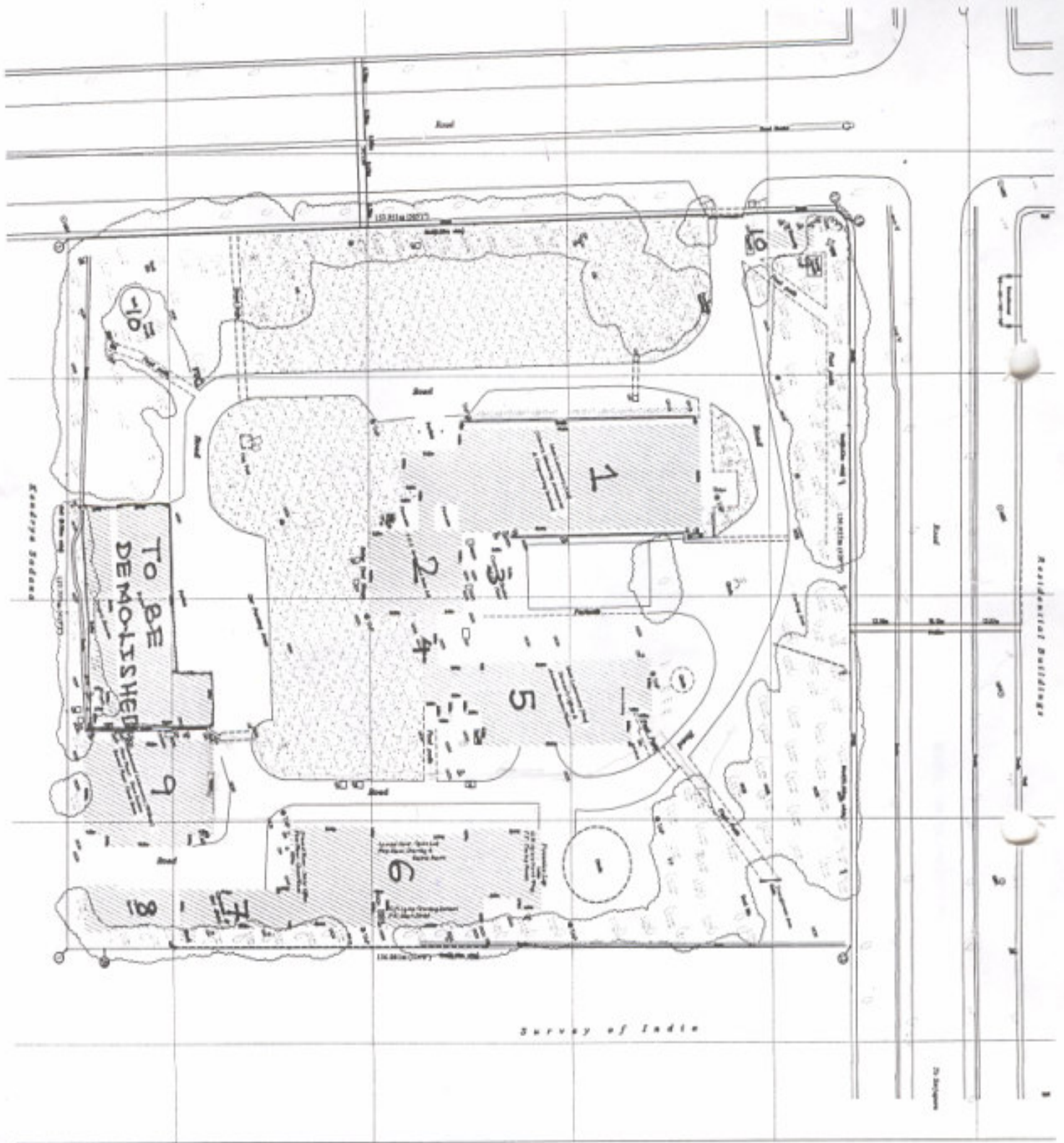
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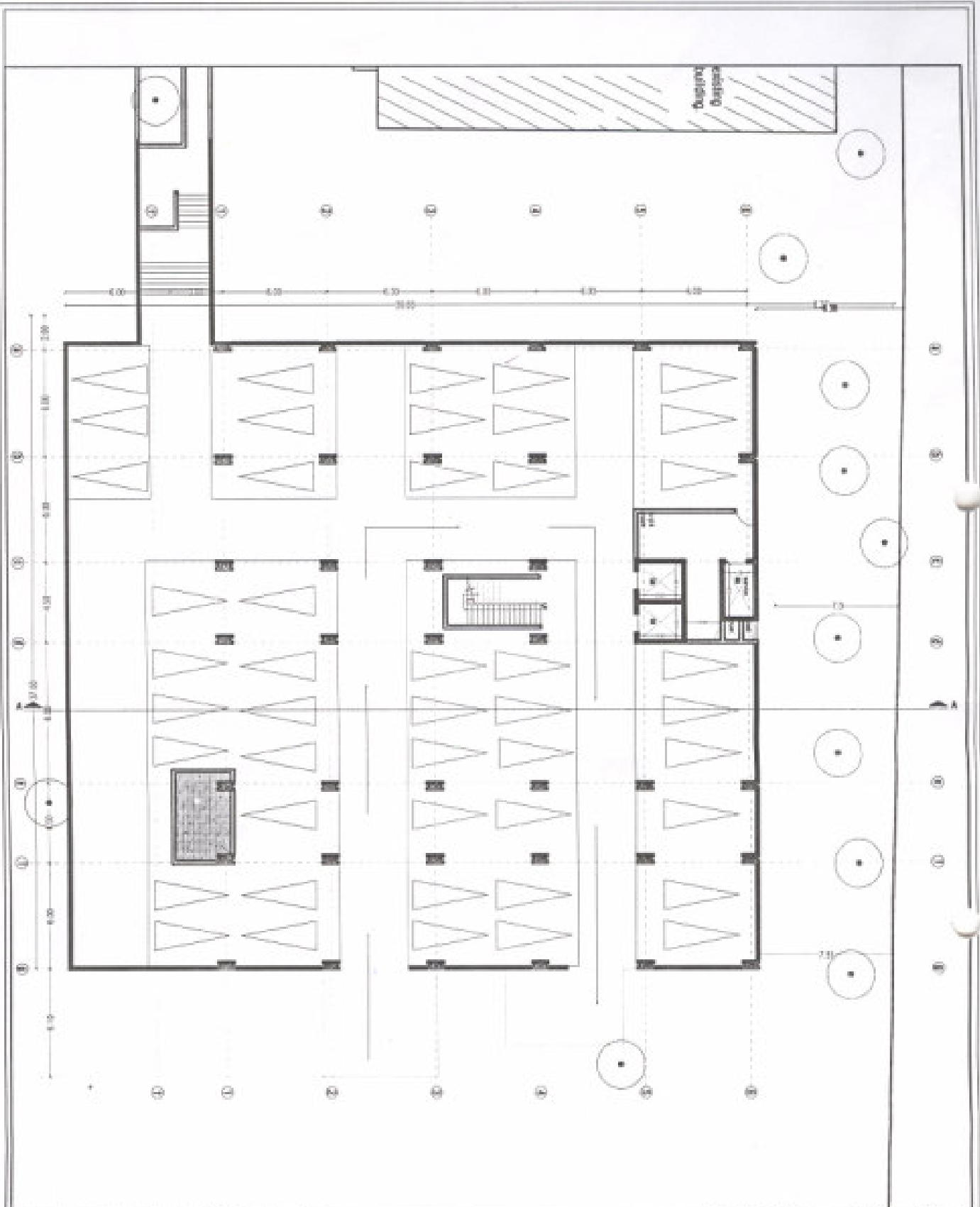
For Office Use Only:  
Nos. of Additions:

Nos. of Corrections:  
Nos. of Overwriting:

## **19. DRAWINGS**







001 11/11

Proposed multi-story building

Indian Institute of Aeronautics  
Baramangala,  
Bangalore

NOTE:

ALL DIMENSIONS IN MM UNLESS  
OTHERWISE SPECIFIED. THE DATE  
ON THIS DRAWING IS THE DATE OF THE  
DRAWING.

NO.

SCALE

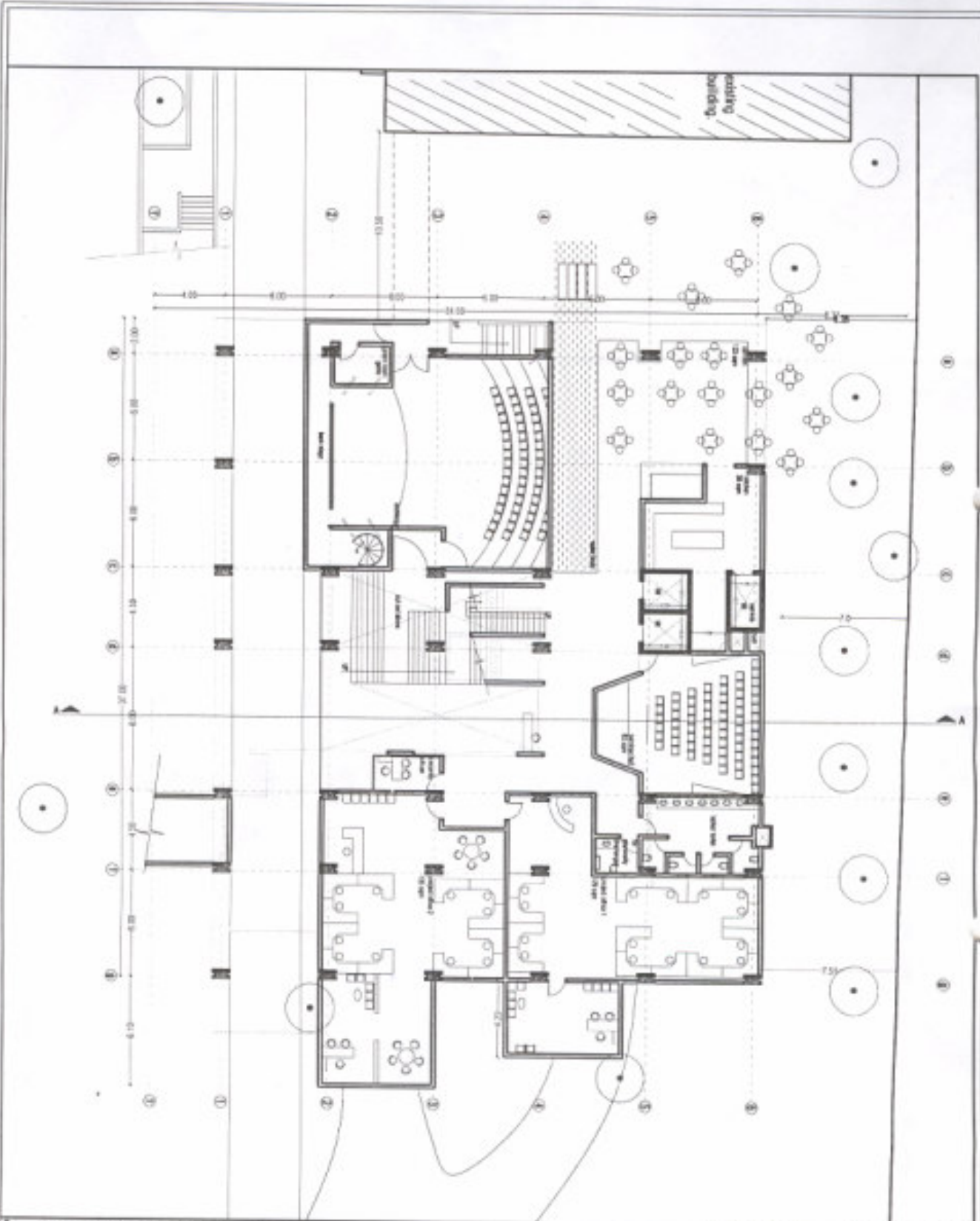
Project - Research Floor

DATE: 10/11/2011 10:17:11 AM

USER: 11111111



100% OFFICE  
100% ONLINE



SEE TITLE

Proposed multi-story building  
for

Indian Institute of Astrophysics  
Kuvempu,  
Mangalore

NOTE:

ALL DIMENSIONS IN MM UNLESS  
OTHERWISE SPECIFIED.  
ALL DIMENSIONS SHALL BE AS SHOWN  
ON THIS DRAWING.

NO.

SCALE: 1/200

PLAN: Ground Floor





69 101L

Proposed multi-story building

Indian Institute of Astrophysics  
Bangalore, Karnataka,  
Bangalore.

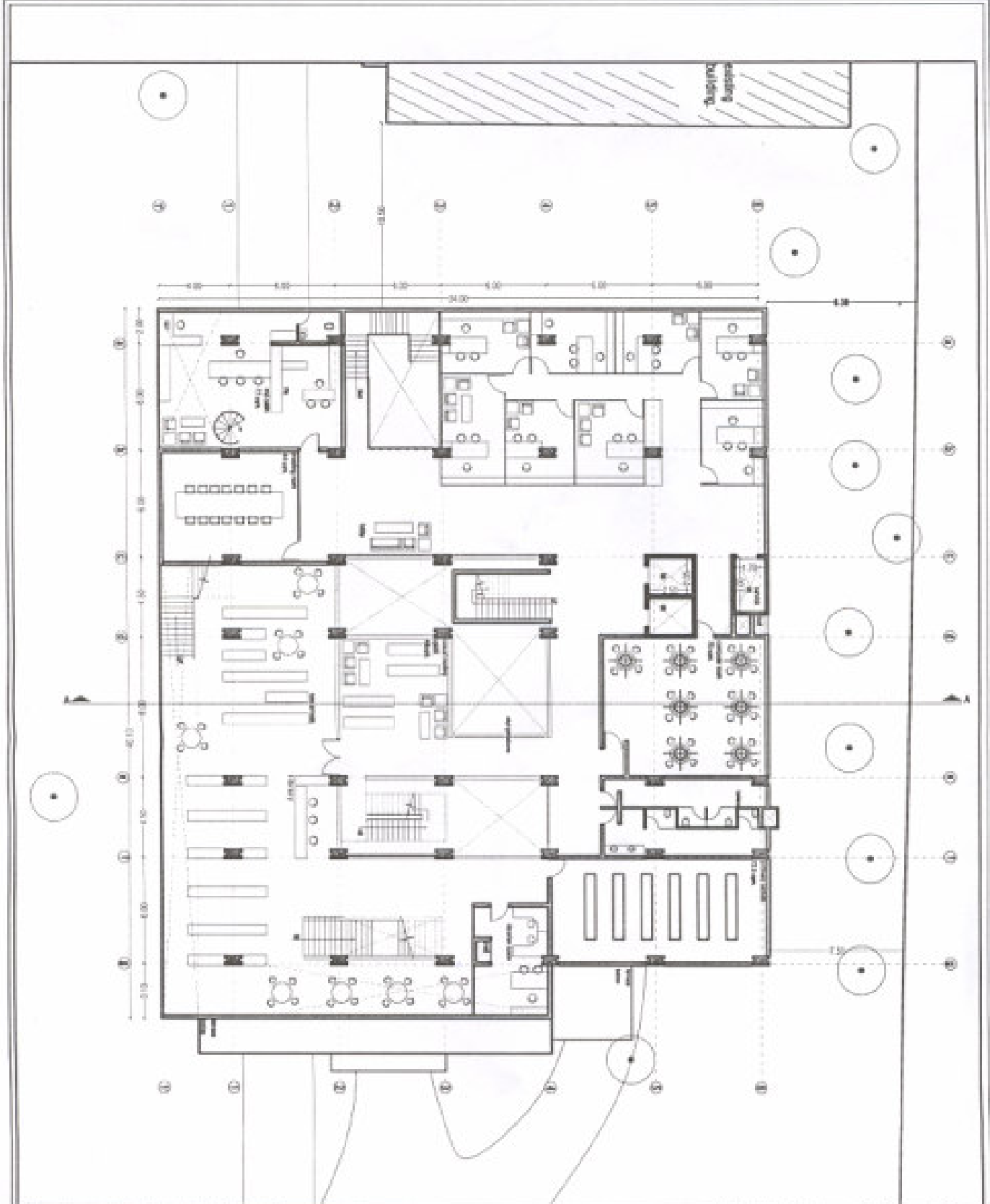
NOTE:  
1. ALL DIMENSIONS IN MM ONLY  
2. DO NOT SCALE THE PLAN  
3. FOLLOW THE WRITTEN DIMENSIONS

NO  
SCALE = 1/200

PLAN - Second Floor







JOB TITLE  
 Proposed multi-story building  
 for  
 Indian Institute of Astrophysics  
 Hennuramangala,  
 Bangalore.

NOTE  
 ALL DIMENSIONS IN MM ONLY  
 ALSO SEE SCALE BAR AND  
 TO FOLLOW THE WRITTEN DIMENSIONS

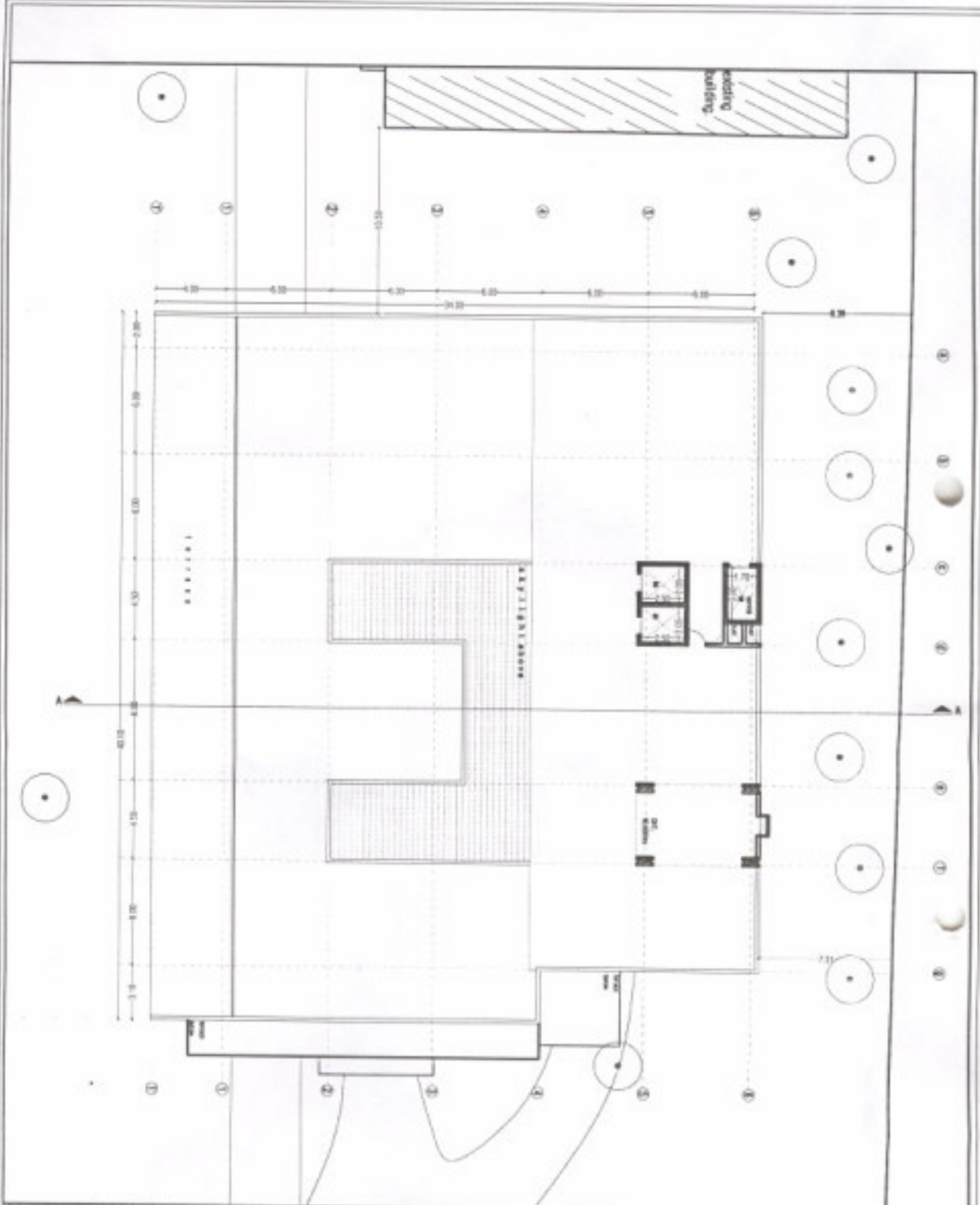
NO  
 scale 1:12

Plan - Ground Floor  
 20.10.17  
 20.11.17









JOB TITLE

Proposed multi-story building

for  
Indian Institute of Astrophysics  
Karnanuragi,  
Bangalore.

NOTE

ALL DIMENSIONS IN MM. ONLY  
ALSO NOT SCALE THE DIM.  
AS PER THE WRITTEN DIMENSIONS.

**NO.**

Scale 1:200

NAME: Tenara floor



DATE: 10/10/2011