



KIIFCON Private Limited

REQUEST FOR PROPOSAL

For

EMPANELMENT OF CONSULTANTS

For

BUILDING INFORMATION MODELLING (BIM)

**RFP No. KIIFC/38/2025-DGM(BD)
18.06.2025**

TABLE OF CONTENTS

Contents

For	1
TABLE OF CONTENTS.....	2
1. Background.....	3
2. Objective.....	3
3. Who Can Apply	3
3.1 Minimum Qualification Criteria.....	4
4. Required Experience & Expertise.....	5
5.1 Detailed BIM scope of work.....	6
5.2 BIM Process.....	7
5.3 Design Authoring, Construction System Design & Record Modelling (As Built) ...	8
5.4 Clash Detection and Design Reviews	8
5.5 Drawing Extraction.....	9
5.6 Take-off Quantities	9
5.7 Phase Planning (4D Modelling).....	9
5.8 List of Deliverables.....	9
7. Right to Accept Proposal.....	11
8. Confidentiality.....	11
9. Delivery of Applications.....	11

EMPANELMENT OF BIM CONSULTANTS

KIIFCON is preparing a panel of BIM Consultants for Building Infrastructure Modelling for Building Projects. Details are given in the attached document. Interested parties may submit their offer in the prescribed form.

1. Background

KIIFCON invites proposals from qualified consultancy organisations to do the “**Building Information Modelling (BIM)** for *the Building infrastructure Projects*”.

The projects include Expansion of Medical Colleges, New Hospitals, Government Offices, Transport hubs, Cinema Theatres, Stadiums, Cultural Centres, etc.

2. Objective

The main objective of this RFP document is to empanel eligible consulting / engineering firms/ companies/ who have proven experience in preparation of the Building Information Modelling (BIM) of building infrastructure projects. With the final design deliverables available, the Consultant has to perform the detailed design in Building Information Modelling (BIM) LOD 300/400 level and based on the nature of the projects fully coordinated 2D drawings can be extracted either from LOD300 or LOD400.

The basic aim of BIM-based Constructability analysis is to review construction processes/methods during the design phase and identify potential obstacles and design flaws that might result in schedule delays, cost overruns, rework, etc. It is very important to identify and resolve any constructability issues that might pop up during the construction of any project.

The detailed scope of services is provided in Section 4.

3. Who Can Apply

Interested firms/ companies/consultants/ with core competence in the above sectors having sufficient manpower and experience can apply. It may either be a Private Limited Company (a company incorporated under the Companies Act 1956) or Partnership Firm or autonomous organisations promoted/sponsored/established by Government of India/State Government(s) including public-sector undertaking or autonomous

organisations/institutions or research organisations or a body corporate under Government(s) incorporated under the applicable laws of its origin. Proposal submitted by consortium/joint venture will not be considered.

The interested firms/ companies/consultants/ are required to submit the following details: -

- Nature of the firm (whether proprietorship, partnership or body corporate company and details of registration / incorporation)
- Financial statements of the entity including P/L account and Balance Sheet for the last three years
- Key personnel/management team and their technical qualifications and experience in the aforementioned domain should be furnished separately.
- Qualifications and experience of Staff members available with the organisation
- Similar completed and ongoing assignments
- Contact address, e-mail ID, Contact mobile number
- The Consultant should furnish an undertaking to the effect that the firm has not been blacklisted/ debarred in India or abroad by any government department/agency.

3.1 Minimum Qualification Criteria

A. The Bidder shall be qualified for further evaluation on the basis of the Bidder fulfilling/meeting the minimum technical qualification criteria set out hereunder:

Sl. No.	Qualification	Documents Required
1	The firm should be partnership firm under registrar of firms or a company incorporated under the Indian Companies Act 1956/2013. The Applicant must have a valid GST registration in India.	The Applicant shall be required to submit a true copy of its Incorporation Certificate and valid tax registration document along with the Proposal.
2	Bidder shall have experience of carrying out similar work of BIM Modelling of at least one project having an estimated capital value of worth at least Rs.100 Crores or two projects having an estimated capital value of each of worth at least Rs. 50 Crores or three projects of each of worth at least Rs. 33 Crores.	Copy of the valid work orders should be submitted with technical bid submissions specifying the date of award of contract.

3	Bidder shall have experience of carrying out similar work of BIM Modelling consultancy of at least One project with Consultancy fee of at least 50 lakhs or two projects of each worth at least Rs.25 lakhs or three projects of each of worth at least Rs. 17 lakhs.	Copy of the valid work orders should be submitted
4	The firm should have received at least Rs. 50 Lakhs (as total turnover) in average during the last three preceding financial years (2021-22, 2022-23 and 2023-24). Proposals without appropriate financial statements and not meeting the eligibility criteria shall be disqualified.	The Applicants shall submit audited financial statements for each of the preceding financial year to support the eligibility claim.
5	Bidder shall have minimum number of key personnel as per the list attached in the Clause 3.	The Applicant shall submit the format duly signed along with the CVs.

4. Required Experience & Expertise

a) List of minimum key personnel

The minimum qualification and experience required for key personnel is given below:

SN	Position	Minimum years of professional experience	Specific expertise
1	Architect/Team lead	10 Years	Should have B Arch degree. Experience in conceiving and designing projects focusing sustainable construction and sustainable destination development including Infrastructure Development Plans, Utilities, Landscapes and area lightings etc. Should have worked as Architectural Engineer for 2 (two) Eligible assignments of similar nature.
2	Civil Engineer	10 Years	Should have B Tech / BE in Civil Engineering. Experience in planning and construction of civil structures with experience in preparation of detailed estimates and designs in current Schedule of Rates

3	Structural Consultant	10 Years	Graduate in Civil Engineering and Masters in Structural Engineering. Should have worked as a Structural Engineer for 2 (two) Eligible assignments of similar nature.
4	Bio medical expert	3 years	Medical professional with min.3 years of experience in the field of Hospital administration and management
5	Electrical Consultant	10 years	Electrical Engineer with min.10 years of Experience
6	HVAC Consultant	10 years	Mechanical Engineer with min.10 years of Experience
7	Plumbing and Fire Protection Consultant	10 years	Civil or Mechanical Engineer with min.10 years of Experience
8	Architectural/Structural BIM Engineer	5 years	B. Tech in Civil Engineering/ B Arch, or an equivalent combination of experience and education may be substituted. 5 plus years of relevant work experience is a must in BIM projects. Proficient user of CAD, Revit Modelling and BIM
9	MEP BIM Engineer	5 Years	B. Tech in Mechanical/Electrical Engineering, or an equivalent combination of experience and education may be substituted. 5 plus years of relevant work experience is a must in BIM projects. Proficient user of CAD, Revit Modelling and BIM

5. Scope of Work

5.1 Detailed BIM scope of work

1. Develop coordinated LOD 300/400 model.

- Develop models of all disciplines to LOD 300/400 as required, as per 2D input design drawings & submittals provided.
- All Technical & design data in input drawings to be reflected in the models.
- Interdisciplinary clash detection and resolution shall be done on these models.

2. Extraction of Good for Construction (GFC) drawings from LOD 300/400 Model.

- Provide required Annotation and coordinated models of all disciplines shall be extracted from BIM model.
- Annotated sheets shall include all required sections, details and schedules for site execution.
- Extraction of Annotated drawings in PDF and CAD formats.

3. Quantity Take off from coordinated models

- Generate Quantity take off and schedule of quantities of all disciplines under scope of within Revit.
- All required parameters highlighting the specification and technical data to be included in the schedule
- Extraction of the generated schedules into spreadsheet.

4. 4D simulation.

- Coordinated 400 model elements are linked with approved construction schedule.
- Develop a video simulation showing progress as per planned schedule
- Update the simulation in later stage as per actual schedule and produce an output showing progress vs actual comparison

5. Develop As-built model

- Update coordinated LOD 400 model as per red line drawings issued from site
- Populate the O&M data of equipment's, devices and fixtures as per approved documents.
- Extraction of annotated drawing from updated LOD 500 model.

5.2 BIM Process

BIM process describes the implementation of Building Information Modelling in the development of the project. An insight into information to be delivered, standards and procedures that the Consultant shall adopt during the project delivery process is shared below.

5.3 Design Authoring, Construction System Design & Record Modelling (As Built)

There will be a master model, which is a compilation of sub-models. The 3D multidisciplinary models shall be enriched progressively from Detail Design to As-Built stages to reach a maturity equivalent to the specifications of LOD 500 as per the applicable standards mentioned in BEP and BIM guidelines issued.

In addition to interior elements, Model(s) shall contain all site-related features of the project which are not integral with the building envelope such as:

- Utilities
- Topography
- Storm water detention and filtration structures
- Paving
- Roads
- Site stairs, ramps, bridges and railings
- Retaining walls
- Site furnishings
- Building models
- Mechanical buried systems

5.4 Clash Detection and Design Reviews

Clash detection of all models shall be performed prior to submission. Workshops to define and manage significant clashes in the federated model will be organized. The results from the workshops will be used to assign these issues to the relevant parties for resolution.

The BIM Coordination Process shall cover various types of Coordination Checks including, but not limited to:

- **Clash Detection:** the process where software functionality allows for identification of spatial conflicts between model elements from different interrelated disciplines.
- **Space Verification:** verifies the functionality of spaces based on explicit spatial requirements. For example, accessibility to technical equipment, room head height, vehicles maneuverability. The construction code compliance verification may be also taken into consideration.

- **Technical Requirements Verification:** the process verifies the technical interoperability of systems. For example, structural dimensional tolerance among structural steel and aluminum façade, power supply to HVAC units or site infrastructure/building system

5.5 Drawing Extraction

Annotated drawings including details for site execution shall be extracted from coordinated models.

All drawings shall comply with required presentation, format, and nomenclature as specified in BEP.

5.6 Take-off Quantities

The Consultant shall use the information imbedded in and extracted from the model(s) for Quantity take off.

5.7 Phase Planning (4D Modelling)

The Consultant shall use the BIM models for simulating construction sequencing in line with the Baseline programme. The 4D simulation shall be submitted as part of verification of billing milestone and monitor the progress of worksite, highlighting planned versus actual progress on site.

5.8 List of Deliverables

The BIM deliverables listed below shall be submitted

Deliverable	Discipline	Format	Version
LOD 400 Models	All	RVT	2019 or later
Good For Construction Drawings (2D Format)	All	DWG and PDF	2010 or later
LOD 300 Model	All	RVT,	2019 or later
Clash Rendition Models	All	NWD	2019 or later
Clash Reports	All	PDF	N/A
As-built drawings (in 2D Format)	All	DWG and PDF	2010 or later
4D Simulations	All	NWD	2019 or later

Quantity Take Offs	All	.XLS	N/A
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6. Criteria for evaluation:

Evaluation of Technical proposal

The Technical Proposal will be evaluated based on Applicant's experience of providing similar services to projects Only those Applicants with Technical Proposals scoring 70 points or more out of 100 marks shall be considered as qualified.

The scoring criteria to be used for evaluation of Technical Proposal shall be as follows:

Sl. No.	Details	Max marks
1	Bidder shall have experience of carrying out similar work of BIM Modelling of at least one project having an estimated capital value of worth at least Rs.100 Crores or two projects having an estimated capital value of each of worth at least Rs. 50 Crores or three projects worth at least Rs. 33 Crores.	10
2	Bidder shall have experience of carrying out similar work of BIM Modelling consultancy of at least One project with Consultancy fee of at least 50 lakhs or two projects of each worth at least Rs.25 lakhs or three projects of each of worth at least Rs. 17 lakhs.	10
3	The firm should have received at least Rs. 50 Lakhs (as total turnover) in average during the last three preceding financial years (2021-22, 2022-23 and 2023-24). Proposals without appropriate financial statements and not meeting the eligibility criteria shall be disqualified.	10
4	Architect/Team lead (10 Years Experience)	10
5	Civil Engineer (10 Years Experience)	10
6	Structural Consultant (10 Years Experience)	10
7	Bio medical expert (3 Years Experience)	5
8	Electrical Consultant (10 Years Experience)	10
9	HVAC Consultant (10 Years Experience)	5
10	Plumbing and Fire Protection Consultant (10 Years Experience)	10
11	Architectural/Structural BIM Engineer (5 Years Experience)	5
12	MEP BIM Engineer (5 Years Experience)	5
	Total	100

Financial proposal

Financial proposals will be invited separately from the empanelled consultants, based on specific requirements.

7. Right to Accept Proposal

KIIFCON reserves the right to accept or reject any proposals or to cancel the process of empanelment of consultants based on this request for proposal at any stage without citing any reason

8. Confidentiality

Information relating to the examination, clarification and comparison of the proposals shall not be disclosed to any consultants or any other persons. The undue use by any consultant of confidential information related to the process may result in rejection of its proposal.

9. Delivery of Applications

The RFP shall be duly signed on each page by a person authorized by the entity. Documents of the entity authorizing such person must accompany the RFP. KIIFCON reserves the right to reject outright any RFP unsupported by proof of the signatory's authority.

The above details along with a covering letter shall be submitted on or before 05.07.2025, 3PM in sealed cover with the name of the respondent and address clearly marked and identified as "Empanelment of Consultants for Building Information Modelling (BIM)" to the following address:

The Director(P&E)
KIIFCON, 7th Floor, Felicity Square,
MG Road, Thiruvananthapuram- 695001,
Kerala.

Any clarification/ communication may be addressed to bd@kiifcon.com.

ANNEXURE I:
COVERING LETTER (ON RESPONDENT'S LETTER HEAD)

To
The Director(P&E)
KIIFCON, 7th Floor, Felicity Square,
MG Road, Thiruvananthapuram- 695001,
Kerala.

Dear Sir/ Madam,

Sub: Proposal for Empanelment of Consultants for Building Information Modelling (BIM)

We, the undersigned, hereby submit our offer for getting empanelled for the “Consultants for Building Information Modelling (BIM) for the building infrastructure Projects by KIIFCON”, in full conformity with the said RFP.

We have read the provisions of RFP and confirm that these are acceptable to us. We further declare that additional conditions, variations, deviations, if any, found in our proposal shall not be given effect to.

We hereby declare that all the information and statements made in this proposal are true and accept that any misinterpretation contained in it may lead to our disqualification.

We understand you are not bound to accept any proposal you receive.

Dated this [date / month / year]

Authorized Signatory (in full and initials):

Name and title of signatory:

Duly authorized to sign this Proposal for and on behalf of [Name of Respondent]

Name of Firm:

Address:

ANNEXURE 2: DETAILS OF CONSULTANCY

(On the Letter Head of the Consultancy)

	Name of Consultancy		
	Ownership		
	Contact Address		
	Name of the Contact Person		
	Contact Number		
	E-mail Address		
	Date & Year of Incorporation		
	Number of years of experience in Consultancy services		
	Number of permanent employees		
	Professional /Consultancy Fee Received by the Consultant	Year	Amount (Rs. Lakhs)
	Any other important information about the organization		

Note:

The following documents needs to be attached with this Exhibit:

1. In case of a Partnership Firm, notarized copy of the Registered Partnership Deed
2. In case of Sole Proprietorship, a proof of GST Registration number/PAN/TAN
3. In case of Limited Company, a copy of the Memorandum of Articles and Articles of Association