

COMMERCIAL OFFER FOR FACADE CONSULTANCY SERVICES

Project : PALOMA REALTY RESIDENTIAL,
KANPUR

Client : PALOMA REALTY

Ref. No. AFSPL/705/CS/2024

Date: 29th May, 2024

To,
PALOMA REALTY
Pillak Nagar
Kanpur, UP

Dear Sir,

Subject: Consultancy services proposal for your prestigious project **Paloma Residential** at **Kanpur**.

We are thankful to you for giving us an opportunity to quote for consultancy services for above said project. With reference to your mail we are pleased to submit our competitive offer as below.

Scope of Works

A) Façade

Stage -I. Pre-Tender Stage

1. Design Concept Review (Architectural Concept Design Review)

- Review of Architectural Intent and provide Façade related technical comments on Architects concept drawings and / or schematic drawings and specifications.
- Discussion with the Architect and the Client to understand design intent
- Recommendation on materials and specifications, value engineering ideas and cost impacts of the design details including optimization of materials wherever required.
- Discuss and submit works budgets and schedules based on final quantities as

2. Submission of Design Basis Report (DBR) /Schematic Design

- Establishment of Performance parameters.
- Define material use.
- Facade modulation
- Submission of Estimated Project Costs & BOQ.

3. Sign off on DBR.

4. Design Development Documentation (DDD)

- Preparation and submission of Concept drawings with elevations / plans/ sections and typical interface details and anchorage and details of the Facade elements at critical junctions/Interfaces
- Submission of Typical system details.
- Submission 3d details for critical junctions

5. Sign off Design Development Documentation.

Stage -II. Tender Stage

1. Tender Documentation

- Formulation and issue of Tender Documents for the Facade package for tendering and construction along with Tender drawings
- Preparation and submittal of detailed technical Specifications.
- Preparation and submittal of detailed Bill of Quantities.
- Prequalification and short listing of vendors for Client's approval.

2. Tender Review

- Response to vendor's queries.
- Technical Compliance review. Assessment of tenders and provide technical assessment analysis on short listed tenderers, as required.

3. Completion of Tender Review

- Review of proposal systems for various facade elements for compliance to

Stage -III. Post Tender Stage

1. Shop drawings , Material sample and Document review

- Review and approval of the shop drawings to ensure that they comply with the specifications and meet the conceptual design requirements. Review materials and samples for approval.
- Review structural calculations for approval. Attending all design coordination meeting along with architect and contractor for approval.
- Review and approve the façade contractor's major suppliers.

2. Mock up Review and Approval

- Review and approve mock up drawings
- Review Performance, Inspection of the full size Visual Mock sample on site and provide written report on the system / glass and compliance of the other components in line with approved shop drawings and tender specifications.

3. Inspection of Fabrication and Installation

- Inspect and check the quality of the components and assemblies and advise the client against defects and deficiencies in the fabrication and installation.
- Random Site inspection will be carried out during various stages of the construction and a report shall be submitted for clients review.
- Inspection of installation of glazed panels and check for material, dimension, fastening system, alignment etc. in accordance with approved shop drawings / Tender specifications.
- Review and witness of field testing reports.
- Inspect water testing as per the Standards and to provide written reports.

4. Closeout:

- Final inspection of all façade elements.
- Snag list preparation.

B) Facade Lighting Design

1. Concept Design

- Concept Idea& References
- Sketches(up to 2 images)& Schemes (up to 2 images)
- Render (static view)
- Luminaire typology& Lighting Scenarios (schemes and diagrams)
- Fragmented DIALux calculation

2. Schematic Design

- DIALux calculations by area
- Preliminary luminaire specifications
- Preliminary budget estimation
- Schematic Renders
- Detailed lighting layout, Shop drawings, Sections, Elevations
- Luminaire Legend & schedule, Luminaire Specifications
- Fixture mounting details

Fee Proposal for Façade Consultancy Services

Sr. No.	Scope of Work	Total Amount (INR)
1	Lump sum Offer for above mentioned works	23,80,000
	Grand Total in INR	23,80,000

Note: GST will be extra as actual.

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Fee Proposal for Façade Lighting Design Services

Sr. No.	Scope of Work	Total Amount (INR)
1	Lump sum Offer for above mentioned works	8,50,000
	Grand Total in INR	8,50,000

Note: GST will be extra as actual.

Terms & Conditions:

- We will start our work after getting work order with an advance.
- We required all latest IFC and structural drawings for the project.
- Change in design input after submission of drawings shall be considered as additional work.
- Maximum duration considered 30 months for this project. If completion time extend then additional charges will be applicable.
- Our offer includes the review of fabricators shop drawings & calculations up to two revisions. Additional revisions will be charge extra.
- We have considered Professional charges for maximum 10 visits for design co-ordination & site inspection in the mentioned fees. For all additional visits Professional charges will extra @ Rs. 20,000 per day.
- All Visit expenses for travel, Cost of air (economy class) travel to and fro to Project related destination(s), Cost of local transportation at Delhi and Project site, meals & accommodation shall be borne by Client.

• Payment Terms

- 10% on completion of design concept drawings & DBR
- 15% on completion of Façade Lighting detailing.
- 20% on completion of Tender documents, BOQ, specifications.
- 15% on completion of review of contractor's structural calculations, shop drawings & mock-up on pro-rata basis
- 20% on pro-rata basis against installation and completion or tender duration of 30 months whichever applicable.

For any clarification or further assistance please feel free to call upon us for more information, we assure you our best services all the time and looking forward to work with your esteemed organization.

For Aluvision Façade Solutions Pvt. Ltd.

Upendra Walinikar

Mobile +91 9769524512

upendra@aluvisionfs.com

BUILDING
It's Reality

Issued 18th June 2023.

FREE PROPOSAL

FOR BUILDING FAÇADE AND DESIGN
CONSULTANCY SERVICES

FOR
PALOMA-KANPUR Residential

PALOMA REALTY, KANPUR

PRO

BES Consultants Pvt Ltd is pleased to offer Building envelope design and consultancy services to Paloma Realty, for proposed high rise residential development at Kanpur. This fee proposal describes our approach to the project based on the project requirements,

1.2. Project Description

Our scope of works is summarized below as received from the project brief, architect intent shown here.

35 Sty residential includes Terraces, Club Level and Ground level

Our experience with similar developments will help to design suitable facade solutions and yet achieving an economical design.

1.3. Client objective

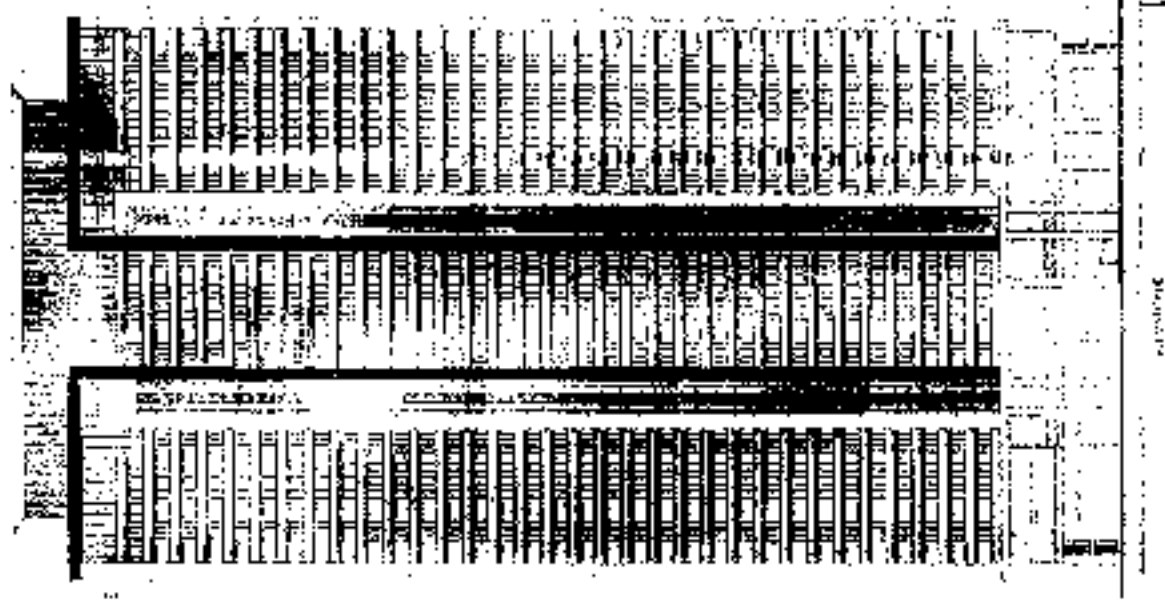
BES aim is to assist our clients to realise their key objectives such as appearance, performance, durability, quality and cost of the façade project. To this effect BES's design of the façade system should address the following key aspects.

- Appropriate use of materials, façade system, specification and detailing
- Appropriate design of structural components and accommodate building movements.
- Economical and within the budget
- Structural and weather performance
- Visual and thermal Comfort for the occupants
- Building aesthetics, Life cycle, long-term durability, Maintenance and cleaning.

1.3.1. Relevant Projects

Following few of our completed high rise residential projects to note:

- The 41 at Chowringhee, Kolkata
- Indiabulls Blu, Worli, Mumbai
- Artesia, Worli, Mumbai
- Avana, Parel, Mumbai
- The Park (Lodha), Parel, Mumbai
- Auris Serenity, Malad, Mumbai



- Extensive experience with High quality projects and complex designs
- Fully resolved pre-construction designs, results costs and time savings to client.
- Strong team at Mumbai with senior façade construction specialist, for on-ground support
- Working in Far East Region (Singapore, Vietnam, Cambodia), able to bring international quality of works

1.4.1. Design Optimisations

We strive to get highly optimized and cost-effective designs with our advanced & integrated workflow.

Material Optimisation

- Our Advanced profile Optimisation software using Autodesk® technology, removes materials with engg validations.
- Engineering workflow helps run linear, dynamic, and FEM techniques, leads to material saving and economical designs yet to rise solutions.

Performance

- We do not limit techniques and typical engg approaches. Our hybrid techniques uses a combination of simulation and analytical results.
- Thermal, Energy, Envg Wind, Comforts, etc.,
- State of the art tools and techniques, lead to highly optimised and verified design solutions

Advanced Design Workflow

- 3d Integrated workflow right from the concept until design delivery.
- Extensivly developed 3d Detailing for complex details, helps the contractor to understand better
- Large amount of data and details provided helps the implementation and successful completion.

Resolved 3D Geometry

- We do not just pass concepts or outline to construction stages. We deliver highly efficient, well-resolved and flawless design with our experienced design team.
- Pre-engineered designs with 3D documentation fully coordinated. No trials and errors are done during the site phase.

Resolved Engineered Design

significantly (time and money) to keep our workflow highly efficient and lead in technologies.

Others



Standard details, not engineered or designed for the project. Actual project design will start with contractor onboard

Heavily documented process in real designs provided

Fully resolved at pre-construction, not starting design all over again once contractor on-board

Highly documented process in real designs provided

Construction stage

Construction

Design process start here, Extensive design and review process. Site progress without resolved designs

No design process at this stage, just validate with pre-construction designs. spend more time on implementation

No value being added, just a lot of money being spent

Value added by the design team. Check approval of construction details

Construction Quality Manage -CQM

Construction Quality Manage -CQM

No senior level skills to understand quality, fabrication issues. No positive impact on the project

High tech tools and gadgets, using NDT techniques. Quality implemented with systematic approach, tracking, etc

Quality issues identified and resolved

Quality issues identified and resolved

Tech, Innovation

Tech, Innovation

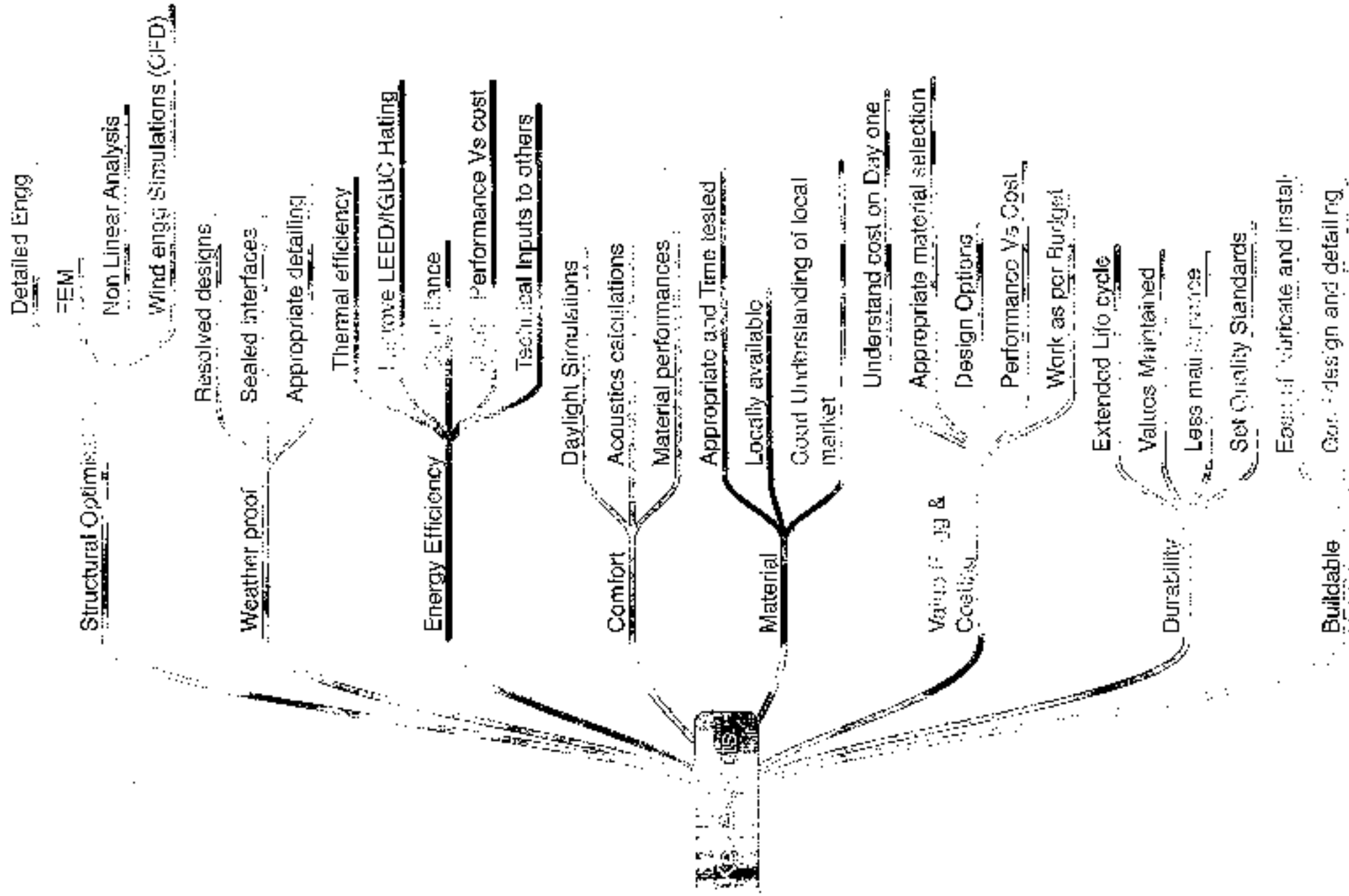
None - Traditional Approach

Apps developed by BES used on our design workflow

Value

Value added by the design team

Our approach is a well thought design process with focus on high value additions to our projects and clients. Following key aspects shall be included in our scope



contractor on-board with much lesser time designs are approved for implementation rather than re-inventing the designs at construction phase. Based on this approach scope of works are covered and commercials are arrived.

Scope Coverage

This fee proposal includes all Ground and all upper levels, entrances, roof terraces as explained in the section 1, basements and no other parts of the development are included in this proposal. Following façade systems envisaged for this building.

Scope Included	Scope Excluded
Following are general façade systems considered for this proposal. <ul style="list-style-type: none">• All level facade systems/windows• Glazing and Cladding• Canopies• Screens / shading of facades• Facade maintenance access	<ul style="list-style-type: none">• Design or checking of supporting main building structure. All façade loads and interfaces will be under BES scope• Wet cladding / tiles / concrete finishes / Metal roofs• Timber / UPVC elements• Any type of Internal glazing• Any submissions to local authority or statutory boards.• Any submission or inputs for LEED certification• Review of fabrication details• Preparation of building elevations / Whole Building BIM / Material take off

3.1. Preliminary/Concept Design

Following scope shall start once the architectural design intent or master plans are finalized.

- Review the current design as per tender documents.
- Façade Systems - Advice on appropriate systems, suitability, modulation and costing
- Materials – Review material options and advise on their comparative benefits, costs and availability.
- Finalise modulation and façade joint lines to suit architect design intent.
- Provide sketches of outline details of systems
- Complete preliminary sizing and outline details.
- Engineering of structural supports for facade systems
- Develop performance parameters for the systems, ie. loads, movements, tols, transmissions.
- Development of a binding geometry appropriate for glazing elements
- Coordination and provide inputs to building structural engineer.



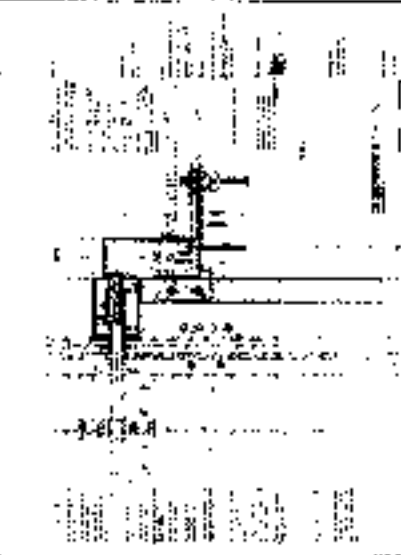
including actual geometries. 3D model will be issued during tender stage

- Propose glazing modulations options to achieve less material wastage and cost saving
- Resolve and finalise the façade geometry in coordination with the architect for modulations and efficient sizes.
- Optimise the geometry to achieve panel repetitions and improve buildable.
- Propose alternate modulations and comparisons
- Optimise wind loads using BES inhouse developed iterative technique and tools, so that glass thickness and framing designs are optimised.
- 3D visualise (BES developed APP) - 3d model collaboration at design stages, for feedback, comments, visualise, etc, - decision based on visualised.

Deliverables upon Concept Stage: Design report which will cover following




Aspects	Deliverables
General designs	Design basis Report - (A3 size), includes Design Parameters, glazing systems, sketches of outline details, typical interfaces, material options etc.,
3D & Geometry	3D Geometry for glazing modulations – for typical façades and corners (internal and exterior views) 2D Elevations and setting outs –for typical facades
Glass Optimizations	Glass optimization exercise with façade modulation options for cost efficiency & aesthetics
Costing	Overall façade costing
Cleaning access / BMU	General arrangement and recommendations.

Deliverable Samples

		
3D Renders & model by BES (from building model developed	Concepts	Resolved design details

Studies		Overall scope	Values to the project
Daylight		<ul style="list-style-type: none"> Daylight analysis will be carried out on typical façade sections as per real time sun penetration. Daylight levels will be presented using contours or with photorealistic images to illustrate natural daylight levels (in Lux) at typical façade sections. 	<ul style="list-style-type: none"> Optimised natural daylight at internal spaces Finalize Glass specifications Inputs to ESD / MEP
Wind flow study & Optimise		<ul style="list-style-type: none"> Carryout computer simulation analysis using CFD techniques to analyze wind flow at critical / peak wind locations and study interferences of other building blocks. Study applicable for building height exceeding 120 M Use weather data (available at BES) with actual wind speeds recorded. Compare wind loads results calculated as per IS/NBC, finalize optimized wind loads 	<ul style="list-style-type: none"> Compare results output from CFD and IS code calculated Finalized Optimized wind loads as per façade type / zone wise
Acoustics		<ul style="list-style-type: none"> Understand acoustic performance requirements based on site noise study reports received from external test agency. Interpret acoustic Noise report, propose suitable façade material and details to achieve desired noise insulation 	<ul style="list-style-type: none"> Acoustic calculation and report with performances Read and interpret acoustic report and propose suitable glass and noise reduction measures

Deliverable Samples

		
Thermal and Shading	Daylight	External wind flow study

- Design intent CAD drawings for glazing system and the support systems. These would convey the design intent and define the geometry of visible elements.
- Preparation of facade schedules, facade works cost estimate
- Review of material and finishes options for all components
- Establish design parameters for facade elements and requirements of any supporting structure
- Engineering and structural design of all major structural elements for facade contractor to adopt the designs at post tender
- All facade details shall be engineered, sizes specified and well resolved, not just limited to generic details
- Identify and specify hardware requirements to comply with functional and local norms such as NBC, CHQ etc.,

Deliverables

- Building facade geometry -partial 3D model of building envelope, setting outs, plans, sections.
- Façade details set includes typical details, connections, bracket, supports
- Building corner, details and Interfaces
- Façade access system – Drawing set showing concepts and general arrangements of the proposed cleaning arrangements covering building facades.

3.3. Tender Documentation

Following scope included

- Provide full technical specification for all facade elements
- Prepare tender BOQ of facade systems
- Review advise on contract documentations
- Help the client team in pre-qualifications of contractors /vendors

Deliverables

- Façade Technical Specification
- Façade Tender BOQ
- Façade Tender drawings

3.4. Tender Stage


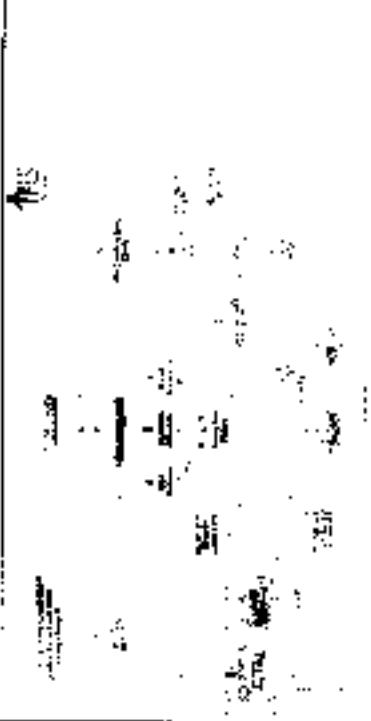

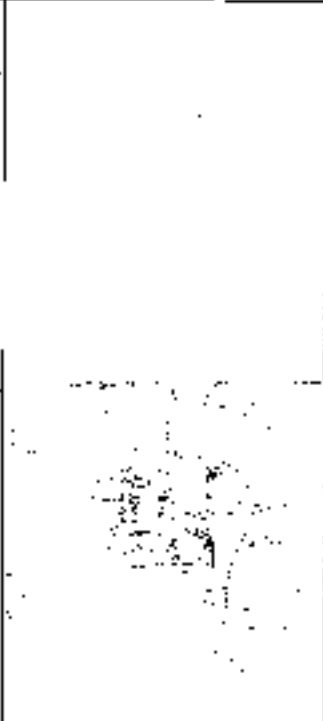

Following scope included

- Advise and recommend prequalification of facade contractors
- Review tender returns and prepare tender queries

contractor will carry out façade design which will be reviewed by façade consultant. Fee allowed for all submissions from one façade contractor.

3.5.1. Our System

We have following in-house Construction Quality Management system using web based (bestec.net) with client login, no extra charges or subscriptions.

Stage	Our System	Key Benefits	
Design review and approvals	<ul style="list-style-type: none"> We don't just comment, we offer design solutions to challenges. On-line approval tracking system 	<ul style="list-style-type: none"> Approval status visible to all, with client web login 	
Materials	<ul style="list-style-type: none"> Standard protocols, flowchart. Reviewed and checked at 2 levels, Not just approved by an individual, 	<ul style="list-style-type: none"> Better communication to contractor Less Abortive works Material approval status known to all, with web login 	
Production checking	<ul style="list-style-type: none"> Standard memos, Request for Inspections, check lists Digital monitoring, mass production can't proceed without BES checks 	<ul style="list-style-type: none"> Systematic checking, service quality maintained by any one at BES, Site works proceeds after all checks are done. 	
Smart Inspections	<ul style="list-style-type: none"> Using high tech tools and Gadgets, not just visual or photos Not rely on just certificates, documents 	<ul style="list-style-type: none"> No compromises with alternates / material substitutes 	
Tracking, Follow-ups	<ul style="list-style-type: none"> Mobile App based inspections with web based report published. Automatic tracking of all issues raised 	<ul style="list-style-type: none"> Whole project team can see issues, close outs thro web login Automated reminders, punch lists. 	

- Review and approve structural calculation, glass and material submissions
- Propose and witness critical site tests
- Review of contractor's method statements and QA plans
- Review contractor's installation method statement and advice.
- Review contractor's preliminary drawings and check the compliance with design intent.
- Review of As-built drawings

3.5.3. Mock-ups & Testing

- Attend the inspection of the visual mock-up(s) with the Architect and client.
- Review visual mock-up drawings and identify any deviation by the contractor.
- Identify the visual issues on mock-up and suggest improvements on details
- Advise test criteria and test methods.

3.5.4. Quality Control -Façade Fabrication & Site works

Our scope is aimed to bring expected quality at the façade works construction and help the site to implement quality system and monitor. On this subject we will cover the following.

- Implement quality control at following levels, these are systematic checking methods
BES shall bring expertise to overcome façade contractor's performance issues
- BES shall implement appropriate tracking, following-ups and site verification until the work completed as per quality standards.
- Identify QAQC deficiencies and advise, bring expertise to enhance quality of façades
- BES uses state of the art tools and hi-tech gadgets for smarter quality inspection.

Site inspections are managed with web/ BESPEC App based for automatic monitoring, issue tracking- improve the site works quality by in-house team, shall be covered as periodical visits

specialist's skill set. The Project Director has the responsibility to ensure that the Client is obtaining the level of service required in a timely manner.

Staff		Position	Project Responsibility	Role on the Project
Rajan Govind		Director	Project Director	Facade Specialist
Naveen Kumar		Associate	Design Team Leader	Facade Designs – 3D works and Design Integrations
Venugopal Rarkur		Associate	Facade Engg. & Site Management	Engineering Checks & QAQC site inspections.



Rajan Govind



Naveen Kumar



Venugopal

Rajan has more than 30 years of international experience within the facade industry, out of which he has served more than 11 years at Arup. With Structural engineering background Rajan has gained working experiences in various regions such as Asia; Middle East and Australia. He is a Certified Singapore Green Mark Manager, enable him to understand sustainable design requirements from Architectural and practical perspectives. He has managed and delivered several large projects with highly practical and efficient designs resulted successful implementations such as, The Park, Brigade Tech Garden, Pan Pacific Hotel, Singapore, ASPTM Hospital, Vietnam. Passionate in future technologies and experiments with innovations, taken various efforts to adopt technology to improve efficiency in design and construction. With his extensive International and regional experience, known for

Naveen has more than 19 years of overall facade industry experience, with 3 years working experience at Arup (Singapore Facade Team) He has worked with leading international facade contractors and involved with design and implementation of complex projects. He has mechanical engg. and industrial background, this unique skill set enable him to deliver greater level of details for bespoke facade systems with good understanding of practical aspects. He has good 3D design, Advance Geometry and integration skills using cutting edge design and 3D tools. He works at advance level on leading 3D software such as Revit, Rhino, Grasshopper, etc, His multi discipline skills and advance level of knowledge and creative thinking, enabling him as a good integrator for complex designs. He has lead design and implementation of several iconic projects such as Esplanade Mall, The Park Mumbai involving high rise building, complex facades. He has played key role in successful

Venugopal has more than 19 years of overall facade industry experience including working experience at Arup (Singapore Facade Team). He has structural engineering background with facade design and implementation experience. His unique skills including resolving complex engineering designs such as 3D Structures, Cable nets, light weight systems, steel and glazing structures. Venugopal has greatly involved and delivered various complex facade projects such as Marvell Heights, Blu, DLF Cyberpark, etc., He has gained good site execution experience on few complex facade implementations such as Mumbai New Terminal (T2) cable net and skylights in which he has gained specialist construction techniques and advance construction engineering techniques. He has performed duties of Quality control Site manager in implementing high quality requirements. He has good design and practical

The fees stated in the table below is a lump sum for the scope of services as defined in section 2 of this proposal, BHS has right to revise fees if any of these assumptions are changes.

Stages	Building	Fees – Without GST
Pre-construction and Construction Stages	1 residential tower, all floors external facades, terraces.	47,00,000

5.1.1. Fee Basis

The fee quoted above is based on the following assumptions:

1. The fees are exclusive of GST at the prevailing rate
2. Income Tax to be deducted at Source (TDS) at the prevailing rate from the said fees.
3. Payments to be made within 30 days of Invoice.
4. Meeting allowances includes attending façade design technical meetings
5. Expenses (flight, Hotel and transport) outside Mumbai will be reimbursed on actuals, above fee excludes outside Mumbai travelling expenses.

5.2. Payment Schedule

Following payment schedule covering above fees,

Stage	Scope of Works	Payment % of Total fee
2.1	Concept Stage –Advance Fee	10%
	Concept Stage completion	10%
2.2	Detailed Design- progress	10%
	Detailed Design- Final	10%
2.3	Tender documents	10%
2.4	Tender Stage	5%
	Post Tender Stage	
2.5	2.5.1 Design Reviews and Approvals (paid in 4 stages)	25%
	2.5.2 Mock-ups	10%
	2.5.3 Periodical Inspections and Close out	10%

5.4. Terms and Conditions

Following are our terms and conditions

1. We have exercised and will continue to exercise in the performance of the services all reasonable skill, care and diligence to be expected of a properly qualified consultant experienced in carrying out work of a similar size and scope to the project.
2. It is acknowledged that you and/or your representative shall have prime responsibility in relation to the obtaining of approvals, permits, licences or other authorisations necessary in relation to the project. We shall aid you in seeking such approvals as further described in this proposal.
3. Professional Indemnity Insurance coverage shall be to the value of contract fees in aggregate, subject to fee agreement terms are complied. This policy will be an umbrella policy, not project or client specific. Any other insurances are charged extra as per actuals.
4. We shall not in any circumstances be liable in contract, in negligence, for breach of statutory duty or otherwise for (a) any loss of investment, loss of contract, loss of production, loss of profits, loss of time or loss of use; and/or (b) any consequential or indirect loss sustained by you. We shall have no liability under, or in connection with this proposal after completion of our services.
5. We shall be entitled to suspend performance of the Services upon giving 30 days prior written notice under any of these following conditions.
 - a. Should you fail to pay our fees in accordance with the terms of this Agreement.
 - b. Any dispute on deliverables or scope of works or dissatisfaction of works or poor relationship with the client team
 - c. Partial payment or withholding payments without mutual acceptance
6. We or you (both the Parties) shall have a right to terminate this Agreement by serving a 30 (thirty) days' notice to the other Party without assigning any reasons to the other.
7. Copyright in all drawings, details, plans, specifications, reports and other work (referred to as the "Proprietary Material") and the designs contained in them which have been, or are to be written, originated, or made by us in the course of performing the services remain vested in us but you shall have a royalty free non-exclusive licence to use the Proprietary Material for any purpose in connection with the project, subject always to payment of our outstanding fees from time to time.
8. You shall not assign or transfer any right or obligation in relation to the services without our prior written consent.
9. The terms of this proposal supersede any previous agreements or arrangements between us in respect of the services. Nothing in this proposal confers or purports to confer on any third party any right to enforce any term of this proposal
10. This proposal and subsequent contract shall be in all respects be governed by and

Fee Proposal & Scope of Works

Project:

Premium Residential, Kanpur

11/09/2017

Lighting Consultancy Services

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Paloma Realty

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Inhabit India Private Limited

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i.1 Project Description

The proposal covers façade lighting design services for the Palama Realty residential development in Kanpur.

Programme

Based on the information received, Inhabit anticipate the design program split to be as per below, commencement dates to be confirmed upon appointment;

- | | |
|-------------------------------|----------|
| 1. Schematic Design | 6 Weeks |
| 2. Detailed Design | 10 Weeks |
| 3. Tender Documentation | 8 Weeks |
| 4. Tendering and Tender Award | 6 Weeks |
| 5. Construction | TBC |

If the services extend beyond this duration, additional fees may be required, and the said additional fees should be valued under a fair and reasonable manner, the contract sum should form the basis of such valuation.

The Inhabit Lighting design team comprises highly experienced and creative designers who are passionate about developing unique and innovative designs that enhance the visual environment.

The lighting team will work collaboratively with the Client and the design team to generate exciting and unique visual experiences that help define the core characteristics of the overall design. The input from the lighting team will add value to the project through the ability to use light to generate welcoming and user-focussed visual environments. The lighting will be designed to be integrated with the built form to provide a homogeneous aesthetic which allows the lighting to highlight and express the materials and architectural geometry.

In concert with our creative objectives, we propose design solutions that are technically robust and demonstrate a responsible attitude towards the environment, maintenance, budget and the project programme. All luminaires proposed will have high efficacies, low-glare attributes, excellent colour rendering and temperatures, long warranties and high-build quality. The lighting control system will provide smart and simple user control, along with the ability for lighting to generate a series of tailored scenes and automated programmes to provide a unique visual experience.

Lighting plays a vitally important role in the success of all projects and we seek to deliver our creativity in ways that augment the architecture and enhance the visual experience of every project with which we are involved.



Unilever Headquarters, Jakarta, Indonesia.

This proposal includes the following areas:

- Building Façade including:
 - Entry portal and canopies
 - External façade features
 - Balcony Lighting
 - Crown feature
- Not included in scope of works:
 - Emergency & Egress Lighting
 - BOH (Back of House) areas including, but not limited to: storage and plant rooms, staff amenities, stairs and corridors, docking/ delivery areas, etc.
 - Building Signage

Wade

Inhabit would be pleased to extend the scope to include any of the areas at a mutually agreed fee, upon request.

4. Scope of Services

4.1 Concept Design

During the concept design phase Inhabit will collaborate with the necessary parties to establish a firm project brief and concept narrative. The following conceptual material shall be prepared to convey the overall intent and allow the Client and Design Team to understand and visualise the lighting concept.

- Attend briefing meetings with the Client and other members of the Design Team.
- Attend design workshops with all relevant members of the Design Team as considered necessary by the lighting designer.
- Establish and become conversant with mandatory codes of compliance and standards that are applicable and/or appropriate.
- Carry out mock-ups to test components of the lighting concepts
- Prepare presentation material to convey the overall design intent which will comprise (at or some); representative imagery, proposed luminaire types, visuals to show the lighting intent (base renders provided by others), sketches, 2D plans, partial elevations, sections and perspectives in sketch format where deemed appropriate by Inhabit.
- Carry out preliminary budget estimate studies

Key Deliverables

- Attendance at design workshops and Client meetings

prior to proceeding with Schematic Design.

4.2 Schematic Design

During this phase Inhabit will undertake detailed studies to provide the necessary technical information and insight to substantiate the lighting concept.

- Attend meetings with the Client and other members of the Design Team.
- Attend design workshops with all relevant members of the Design Team as considered necessary by the lighting designer.
- Carry out mock-ups to confirm specific components of the lighting design
- Carry out illuminance and/or luminance calculations studies where deemed necessary by Inhabit or that may be required by regulatory authorities.

Key Deliverables:

- Schematic design report to explain the design intent in detail, which shall comprise (all or some):
 - o Representative imagery
 - o Visuals to show the lighting intent (base renders provided by others).
 - o Proposed luminaire types,
 - o Detailed sketch format of: 2D plans, elevations, sections and 3D perspectives/ visuals where deemed appropriate by Inhabit.
 - o Extracts of relevant standards and/ or codes of compliance which are recommended, or the lighting needs to conform to.
 - o Lighting/ Illuminance/ Lux calculations which shall be shown using lux plots and false colour renderings.
 - o Estimated budget for luminaires and control equipment
 - o Estimated lighting power density summary

Note: Inhabit will require the Schematic Design and budget estimates to be approved by the Client prior to proceeding with Design Development.

4.3 Design Development

Once approval of the Schematic design has been provided by the Client, we will prepare design development documents as follows:

- Attend design workshops with the relevant members of the Design Team as considered necessary by the lighting designer.
- Preparation of final lighting layouts indicating fixture locations, luminaire references and control intent/ groupings. The proposed lighting design is based on AutoCAD – files provided by the Architect.
- Preparation of detailed equipment specification/ luminaire schedule.
- Preparation of lighting control system schematic, lighting scene schedule and power load

and cable management.

- Coordination with AV, MEP & ESD Engineers where required

Key Deliverables

- Draft performance specification
- Luminaire schedule
- Luminaire BOQ including lighting loads
- Lighting architectural details
- Lighting layouts including control groupings
- Draft Lighting Power Density (LPD) estimates
- Illuminance/ luminance calculations applicable to required standards and/ or codes

Note: Inhabit will require the Design Development submission to be approved by the Client prior to proceeding with Tender Documentation stage.

4.4 Tender Documentation Stage

During this phase Inhabit will provide the following:

- Prepare the tender information comprising of equipment specifications, cut-sheets, drawings, and appropriate clauses and conditions regarding the performance and contractual restraints on the Contractor, to be incorporated into a tender package by others.
- Review final contract documents. Allow inclusions of works into the architectural, interiors, MEP, and any other Consultants affected by the Lighting Consultant's work.
- Prepare a list of suitable Contractors and Suppliers who are technically and commercially capable of undertaking the works.

Key Deliverables

The following will be provided to form the Lighting Tender Package:

- Meeting attendance
- Performance Specification
- Finalised Lighting layouts with critical dimensions and control groupings
- Luminaire schedule
- Control system methodology/ schematic and lighting scene schedule
- Coordinated lighting details
- Lighting Power Density (LPD) summary

Note: The luminaires and other equipment we propose will be selected on their performance, quality values, and appropriateness for the design. Should an alternate be proposed, we require working samples to be delivered to our nearest office for our assessment. The purpose of this is so we can maintain the integrity of the design and be certain that the outcome is in line with Client expectations and performance specification.

breakdowns provided by the tenderers and advise on compliance with the approved design, budget, provide any other comments and recommendations with respect to the acceptance of the preferred tenderer.

- Provide assistance in the event that the Project Manager requires appropriate lighting advice to respond to tenderers queries in respect of drawings, specifications, instructions and changes in the tender schedule and procedure.
- Evaluate the tenders, and provide recommendation on tender submission; assist in tender interviews and appointment of the Contractor.
- The following points will be reviewed for compliance with the lighting contract documents.
 - Conformity with required technical performance objectives.
 - Conformity with required architectural and aesthetic objectives.
 - Conformity with required quality objectives.
 - Adequate coordination of interface details with other trades.

Key Deliverables

The following will be provided:

- Meeting attendance
- Tender review report including recommendations

4.6 Construction Phase Services

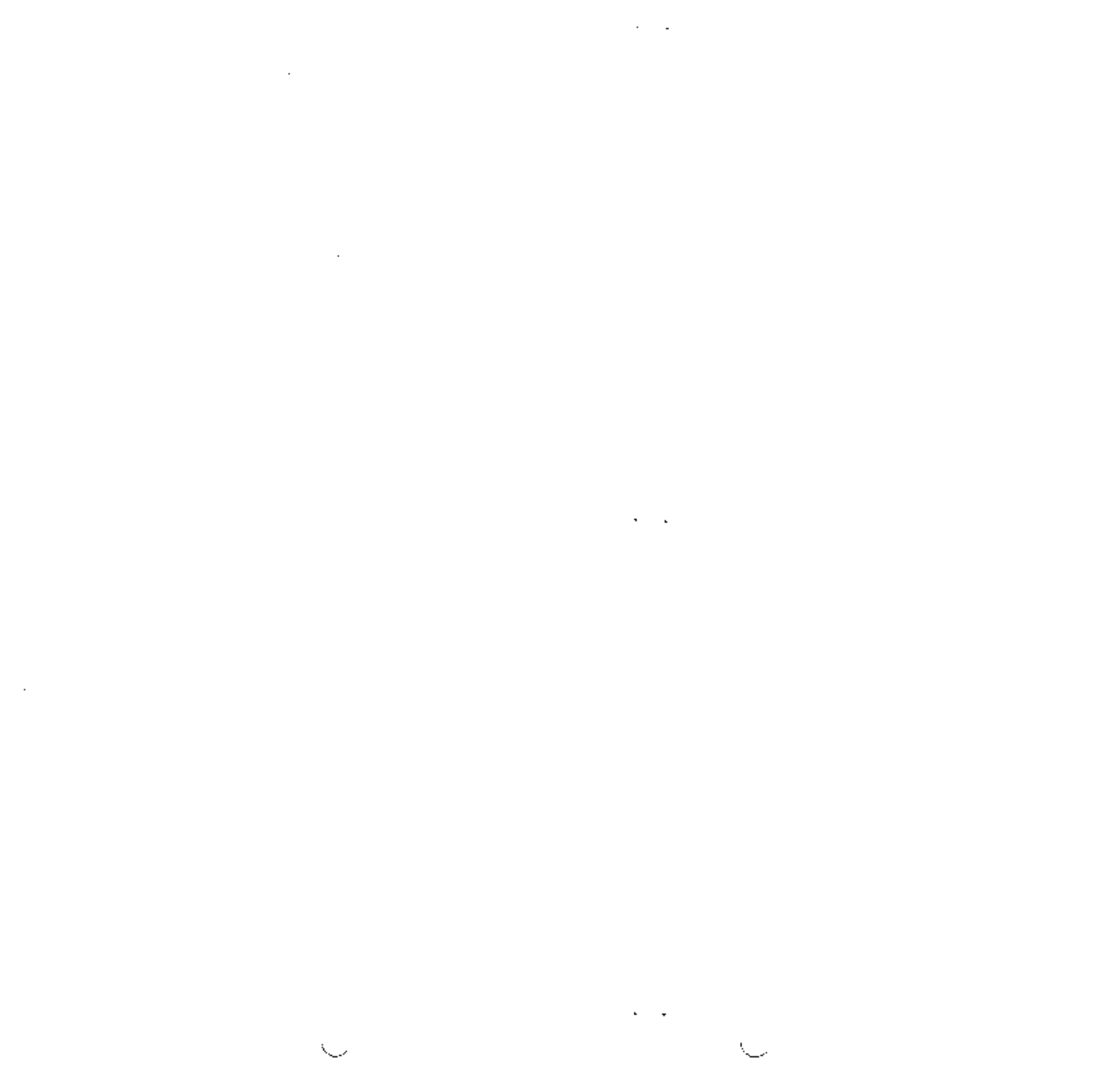
During the Construction phase Inhabit will provide the following:

4.6.1 Shop Drawing and Sample Review

- Inspect sample luminaires and cut-sheets provided by lighting suppliers and/ or Contractors, and provide recommendation for approval or rejection based upon the performance criteria specified in the lighting documentation package.
- Review and provide comment/approval Contractors' shop drawings and product specifications for compliance with the contract documents.
- Review and provide comment/approval of installation details of lighting fixtures submitted by the Contractor.

4.6.2 Site Inspections & Commissioning

- Attend site for benchmark inspection and during construction to inspect the installation of the lighting scheme, monitoring compliance with the design intent, and report any issues that arise relating to the specialist lighting.
- Respond to Request for Information (RFI's) in a timely manner
- Conduct defect inspections and issue defect reports as required, particularly in the lead up to practical completion.
- Review the operations manual prepared by the Contractor.
- Attend site to direct Contractor to him all adjustments to luminaires (the Contractor shall provide



Terms and Condition are to be finalised upon award of consulting services, generally the following shall apply:

5.1 Fees, Taxes, Liability

- The Client shall pay Inhabit the fee in our designated bank account in India, Goods and services tax and bank charges are excluded in this fee proposal,
- Services shall be invoiced monthly, based on percentage of completion of services. All invoices are to be settled within 28 days.
- This consultancy service is provided with a Professional Indemnity Insurance of an aggregate sum equivalent to the agreed fee.
- Work that is not covered under this scope of work will be subject to prior written agreement from the Client, and will be based on the rates outlined in the table below.

Director	₹ 18,000 /h
Principal	₹ 15,000 /h
Team Manager	₹ 13,000 /h
Senior Designer	₹ 6,000 /h
Designer	₹ 5,500 /h
CAD Designer	₹ 3,000 /h

5.2 General

- It is assumed that the contract will be awarded based upon a single tender process. No split tenders or phasing of works has been allowed for.
- No allowance is made in this proposal for major design changes or re-design after reaching sign-off milestones,
- The proposal is valid for 60 days.
- All documentation will be provided in English.

5.3 Exclusions

The following are excluded for the lighting design scope of services:

- No allowance is made for making Government or Authority submissions.
- No allowance has been made for coordinating, or submission of design material for the exterior lighting (including pedestrian and road lighting) with local authorities or government planning departments.
- Emergency & Egress lighting
- BIM/ Revit services
- Submissions for LEED/ BEAM Plus, etc.

- Any works associated with Electrical, mechanical and structural engineering services. This includes any calculations, specifications, etc, of any materials and/ or equipment which are not directly related to the lighting design scope of services and profession – i.e. cable sizing, distribution boards, conduit routes, junction and external pit locations, load compliance, etc.
- Detailed costing reports including quoted prices for any lighting equipment or installation costs
- Detailed summary reports showing illuminance levels other than those deemed necessary by the Lighting Consultant for general evaluation of the design. Dialux will be used for any necessary calculations. Use of other calculation software's excluded.

5.4 Travel

All design coordination and periodic site inspections are to be carried out by Inhabit's Mumbai based staff. Any travel outside of Mumbai for local staff shall be reimbursable as per actuals on presentation of invoices. For this proposal we have assumed a total of 6 trips to cover design coordination and site inspections and commissioning.

6. Fixed Fees

We confirm that we shall carry out the works described in this proposal for a fixed price fee as outlined below.

Stage	Design Services	Fee %
1	Sign-on Fee	15%
2	Concept Design	15%
3	Schematic Design	20%
4	Design Development	20%
5	Tender Documentation	10%
6	Tender Stage	5%
7	Construction Phase Services, including: <ul style="list-style-type: none"> - Shop Drawing and Sample Review - Site Inspections & Commissioning 	15%
Total Fee (INR)		19,00,000

Please confirm your acceptance of this proposal by signing and returning a duplicate copy of this proposal to our office.

For and On Behalf of:
Inhabit India Pvt Ltd



Gautam Bhasin
Director

Date: 20/06/2024

Agreed and Accepted:

Name:
Designation:

Date: