

# **B. Architecture**

## **Professional Practice and Ethics (AR6703)**

### **Architectural Competitions**

### **Lecture - 3**

#### **Mode of Engaging Architect:**

Mode of an engaging and architect will be,

The function of the finished project- Who will use it and for what visualize these activities and how they can be accommodate in the new space?

Your motivations & expectations– What does the client hope to achieve from this project? So in short and long term?

A design direction– Contrasting or keeping with existing buildings? Contemporary or Traditional? Favorable finishes, materials or texture?

Authority for decision making– Who will sign off decisions about design, about costs and about day-today matters at site?

Timetables and Budgets– Like the schemes when should key work stages be completed? Cost and financing? So the schemes this is an architect can be engaged

#### **Mode of Engaging an Architect**

- How are you going to add value to the project?
- How are you going to pave way for the successful delivery?
- How to develop a sound working relationship with the client?
- Time spent in prelim discussions
- Requirements analysis
- Time schedule and budget
- Nature and cost of professional services required
- The total cost

These are the important things which will make good relationship with the client so keep on tracking with these strategies

- Investigating the feasibility of the requirements
- Developing design proposals
- Applying for statutory approvals
- Preparing construction information
- Obtaining tenders for building work
- Analysis of tenders/ pre-qualification/negotiation/ award
- Administering a building contract

This is how the architect can be engaged in the form and this is how he can be detailed up like the

### **Appraisal**

- Identification of the client's needs in the objectives, business case and the possible constraints on development, so it's like the concept making he should be aware of the request and the client needs in order to satisfy a concept, so this is important to identify the clients need and objective at this appraisal stage itself
- Preparation of feasibility studies and assessment of options to enable the client to decide whether to proceed or not,

Then second important stage is this designing a brief

### **Design Brief**

- Development of the client's initial statement of requirements into the design brief by or on behalf of the clients conforming key requirements & constraints
- Identification of this procurement method is important as procedures, organizational structure and the range of consultants and others to be engaged on the project

So this is important strategies to design a brief in order to make sit of every other staffs in order to create a brief in client needs, so the client needs will be listed out like that and the brief will be making it ready there we go start up with the concept stage.

### **Concept**

- So implementation of design brief and input to the project brief, so this will be having the direct link to the concept yes the clients need again.
- Preparation of concept design including outline proposals for the structural and building services systems, outline specs and prelim cost plan
- Review of the procurement route

And students this is how your staffs always wanted to have conceptual plan before you getting into AutoCAD's or drafting straighter way, so keep having the conceptual way of scheming first, so design development preparation of developed design to include the structural and building services systems update your outline specs and prelim cost plans. Completion of the projects brief application of the detailed planning approvals, this is how a design will get developed, so preparation is the main scheme from the concept stage you should be sitting along to get the scheme you should be properly and regularly worked to arrive at a design including the Bevoques because you should be assisting these specs guides, so cost plans, completion of the project brief will be helping in the design development stage.

## **Technical Design**

- Preparation of technical designs & specs sufficient to coordinate components & elements of the project and information for statutory standards and construction safety. So this is one important agenda while you have technical design you should be sitting and scheming this type of technical designs and specs.

## **Preparation of Documents**

- Preparation of documents sufficient to enable tenders and obtain tenders, so this preparation of document stage is what we goanna see in a futures chapters about tenders and contracts will be coming and that time the documentation preparation will be the basic core for every scheme
- Application for the statutory approvals and more
- Preparation of further information for the construction and required under the building contract, this is how the documents will be prepared

## **Tender Documentation**

Preparation and/or collation of tender documentation in sufficient detail to enable a tender or tender to be obtained for the project

### **Tender Action**

- Identification & evaluation of potential contractors and/or specialists for the project
- So obtaining and appraising of tenders
- Submissions of recommendation to the client

This is one tender action this will be leading after this tender documentation, so the documentation will be leading to the actions so every schemes will be reflecting towards your project than this is a right here, so documentation will leads to the action and this action of submission will recommended to the clients.

### **Mobilization**

So mobilization is the next step letting the building contract pointing the contractor, yes this is how it goes and works on the side issuing the information's to the contractor regular scheme arranging the handover to the contractor so everything you have to see to it like every single details that you draw at your office should reach the contractor in order to keep up the progress sequencely.

### **Construction to Practical Completion**

- Administration of the building contract to practical completion
- Provision to the contractor of further information as when you reasonably required
- Review the information provided by the contractors and specialists

So this practical completion will be happen only if you keep one tracking the construction scheming and the mobilization from along and from the details scheme towards its product, so the practical completion is one review of information provided by the constructions and specialty so far

### **Post Practical Completion**

- Administration of building contract after practical completion and making final inspectors
- Assisting buildings users during initial occupation period

- So post occupation evaluation
- Review of the project performance in use, so keep on tracking your practical completion methods.

## **Services Offered by an Architect:**

There are three types of services which is of

- Comprehensive Services
- Partial Services
- Special Services

So he will going to classify and explores the details of these three services first,

### **Comprehensive Services**

- This thing COA stipulates the parameters within which the architect is required to function and are applicable to all architects and such architects who have specialized in areas such as
- Structural Design
- Urban Design
- City Planning
- Landscape Architecture
- Interior Architecture
- Architectural Conservation

So these are the general terms and specialization under this comprehensive services where when architect can play and there we goes the comprehensive services and that outcomes the summary

- Taking client's instructions and preparation of design brief that will lead you to the positive happy good
- Site evaluation, analysis and impact on the immediate environment
- Design and site development and structural design
- Sanitary, Plumbing, drainage, water supply and sewerage design
- Electrical, Electronics, Communications system and design
- HVAC – Elevators, escalators etc
- Fire detectors, fire protection and security systems
- Periodic evaluation and inspection of construction works

So these all these things should be happening in the hand in order to get the services done at peace.

### **Comprehensive Service- Interior Architectural**

Comprehensive Services is the one when you consider the interior architectural perspective

- This primary objective is to generate a purposeful ambience that will stimulate the user's creative potential, protect the users from the extremes of weather and also nurture them emotionally.
- Aim is to meld the interiors and exteriors into symbiotic relationship through Scale, Volume, Light and Shade & Human Perspective
- Interior spaces must be designed to fulfill the fundamental functional and aesthetical needs that make the interiors efficient and pleasant to live and work in of course
- Development of Design is a very conscious act and it infuses life into interiors subconsciously

So we should be design such a way so interiors reflect the peace to their sole

### **Comprehensive Services– Allied Fields**

- Interior Architecture
- Landscape Architecture
- Architectural Conservation
- Retrofitting of Buildings
- Graphic Design and Signage

These are the Allied Fields of comprehensive services comprises of, so comprehensive services again with the architectural interior when we go

- Site evaluation and assessment
- Interior Design– Space Planning and volumetric study
- Architecture additions and alterations
- Interior related civil works
- Design of fixed items of work and loose furniture
- Illumination design
- Sound and Acoustic design
- Graphic Design

- Indoor Plant scape
- Selection of materials and more
- Integration of all the engineering services
- Periodic inspection of evaluating and work at site questions and answers and compiling of the QA/QC

### **Comprehensive Services– Landscape Architecture**

- When we deals with the analysis, planning and designing management, preservation and rehabilitations of land
- Capable of producing and ecological sensitive design which is self-sustainable
- Integrates from the very conception, the elements of architecture, Urban Design and civil engineering
- Covers a wide spectrum ranging from landscape planning at regional/city scale and private ones
- Office Plazas, public squares and highways, city parks.

So this is how the landscape architecture works and the comprehensive services which is going in the hand is

- Site appraisal and suitability
- Site planning
- Land form and grading because it seems to be simply called the contours.
- So the surface drain design and water management
- Irrigation design and planting design
- Open space design– hard and soft areas
- Landscape structures and features
- Garden furniture design
- Illumination design
- Graphic design and signage

There are so much periodic inspections and evaluations at the side, so this are the main services that will be holding when you have an architecture landscape this will be happening

### **Comprehensive Services- Urban Design**

Which will be the architecture of the cities highly complexive and gargantuan in scale like that dark change it will be

Primary aim of UD is to imbibe and maintain a sense of identity and harmony among buildings, open spaces and other structures by means of a pleasant and memorial visual imagery throughout the length and breadth of an urban setting. Volumetric relationships, harmonious spatial sequences, transition from buildings to open spaces, streetscape and the services infra must together create a town space with an exclusive imagery. So this is how it works for the urban designer

- Taking client's instructions and preparations of design brief, design brief will play major role in urban designing
- Site evaluation, analysis of architectural character, social issues and heritage
- Feasibility study
- Preliminary proposal for development / re-development and their impact on immediate environment
- Volumetric study and Urban form recommendations including pedestrian/ vehicular movement and parking
- Architectural controls and guidelines
- Conceptual design of site development and their interconnectivity
- Landscape architectural design is also coming in now
- Architectural conservation will be happening, since we need to preserve our culture
- Graphic design and signage, this is comprises of a urban design, there we go after the comprehensive services there is a partial services
- Full Services
- Concept Design, Design Development
- Development Application
- Construction Certificates
- Documentation
- Contract Admin and Site Works

This is called full package and it's called full services

### **Partial Service**

This is the term used when not all of the above stages are completed by the architect

- But use an architect concept design and design development and leave development application or approval processes to a third party. This



can be happen yes you need not to do all the part of an architect do you can assign a project manager of course a concept designer and a draftsman work in a form your jobs, to save an architectural fees the client may take full architectural services but may leave the contract admin and site works, yes in order to save your fees this is the thing clients will be doing to you.

So there are certain special services also, these are the special things

### **Special Services**

- pre-design services which will be pre-design you need to take upon that's it
- post-construction services like the debase and dispose of its like that
- Site development services will be renovating on more
- Materials and systems testing
- Promotion of PR
- Documentation services
- Architectural conservation
- Interior Design and Design services
- Expert witnesses
- Computer Applications
- Urban Design
- Research

This is what the special services will be holding on the special services pre-design services and post construction services it can be divided into this way, so the pre-decision will be

### **Pre-design Services**

- Facilities Programming
- Feasibility Studies, yes we need to be having the feasibility study before we perform any design at any site
- Existing site and facilities analysis
- Traffic and parking studies
- Equipment and furniture inventory we need to calculate the amount of estimation furniture in future, this will be helping to cut short furniture expenses
- Energy analysis
- Master programming and planning

- Environmental studies
- Space schematics/Flow diagrams
- Marketing studies
- Financial Analysis
- Project financing
- Advisor for architectural

This is what the pre-design services happening, if we go say it in the other hand of post construction services

### **Post-Construction Services**

- Commissions services
- Post occupancy studies
- O & M Programming
- Building maintenance manuals
- Post occupancy evaluation

This will be happening in the post construction services and this is what when we site development services at the point of site developing stage this will be the things happening at the site

### **Development Services**

- Site analysis and selection
- Site developing planning and site plan agreement
- Detailed site utilization studies
- On and off site utility studies
- Environmental studies and reports
- Zoning and land use amendments
- Geotechnical Engineering
- Site surveying
- Legal survey
- Landscape Design

When you are the material & systems Test

- Procurement of the testing services
- Review of analysis of testing, it will be happen in order to know that quality and survey of the material

When you are in the promotion of the PR

- Preparation of press releases
- Promotional brochures
- Public meetings
- Leasing materials
- Advertising
- Models
- Renderings
- Presentations

This will all be the pull factors the clients to buy a product or to grow more then this is the documentation service will be preparing special certificate certified areas and preparing the measure drawings, building inspections and more about the photography's, still photography's existing conditions, photography and video, computer DB and inventory of materials, furnishings and equipment. This is what it will be happening when our documenting services then architectural services. We all know about historical building documentation, renovation, retrospection everything will be come under this architectural conservations. So there will be the conservations coming out and then when will check about this

### **Special Services– Interior Design Services**

- Space Planning
- Adaption of M&E systems to tenant needs
- Preparations of furnishing requirements
- Bidding or purchasing procedure for furniture
- Furniture equipment
- Special furnishing
- Tenant related services
- Interior (while talking about the interior with more about the movable stuffs such as furniture's, lightings and more because this skill gives the life to every interior design, so there we go and)

### **Special Services- Project admin and CM services**

- Project Admin
- cm services is something which will be project admitting and checking and consulting like submitting every services, owner supply, data coordination like data collecting he will be securing and
- scheduling the development monitoring

- Testing and inspection admin
- Supplemental Documentation
- Admin of multiple contracts
- Detailed cost estimation
- Life cycle cost analysis etc
- Including the manage stuffs

## **Expert Witness**

Expert Witness is another thing of special service which is coming under

- This will be testimony at court or hearing
- Opinion on codes or regulations is so lawful and that goes expert witness

## **Computer Applications**

- Computer Renderings it's so digitalized
- 3D computer representations and walkthroughs
- Electronic communication and administration
- Project scheduling
- Project Accounting

Everything will be computerized, so urban design is a thing

- Streetscape design
- Drafting and zoning
- Shadow studies
- In order to design where to give the shades natural shades and artificial shades
- Urban design studies
- Wind studies
- Land use studies
- Transportation studies

Have to be made if it is a urban design. So research when we talk about research in constructions materials and methods Building envelope investigation.

## **Scope of work of an Architect:**

Scope of an architect work from conception to completion and beyond under the COA's guidelines

- The architect, after taking instructions from the client, renders services under the following stages
- Client's brief
- Concept design
- Preliminary drawings and designs
- Drawings of the client
- Working drawings and tender drawings
- Appointment of the contractors
- Constructions
- Reports will be

These are the seven stages of scope work of an architect though client brief and retainer, when we talk about this client's requirement of the project

- Site visit should be often in order to give strength to the client should that the architecture constantly working and give him in fees
- Examine the codes, legislation and standards
- Requirement list in agreement with the clients as the programme of requirements
- Condition of the engagement, scope of the works
- Letter of appointments enter into an agreement
- Fees payable advance paid a retainer of Indian rupees 20,000 or 5% of the total fees payable whichever is higher as a token of intent

### **Stage 1- Concept designing**

- Site evaluation is the first thing survey of the site should be done and soil test is must in order to freeze the site and stability of the soil
- Rough cost estimation is the one main brief that every client need at the stage one
- So fees payable is 10% of the total cost at the moment

### **Stage 2- Preliminary Design and Drawing**

- Incorporate changes in the drawings as the clients need or the site condition to changes should be done
- Preliminary drawings will be providing and the preliminary cost estimate which will further give the basic idea of the fees

- So fees payable is but this now 20% of the total fees payable less the payment made at stage 1, so fees payable here at 35% of the total fees payable less the payment of the stage 1 and 2 happen

### **Stage 3– Drawings for clients/Statutory Apps**

- Drawings for approval from statutory authorities – incorporate client's suggestions, prepare drawings necessary for approval from the client/statutory authorities. So here the fees payable will be 35% of the total fees payable less the payment made at stage 1 and 2, so at the point of stage 3 we will be paying 35% of the total fees for the architect

### **Stage 4– Working Drawings & tender Docs**

- Provide information's to consultants with all necessary information to allow them to perform their specialist work. So list of contractors prepare as a shortlist of suitable contractors with appropriate justification will be happening, tender documents will be living here
- So fees payable at this stage will be 45% of the fees payable less the payment than the stage 1 to 3

### **Stage 5– Appointment of the contractors**

This is one stage where you appoint the contractors where the tender document, so at this stage 55% of the fees can be payable, so at the construction stage there will be BOQ supplying all over the side and site supervisors and samples, site visits will be happening by this stage fees payable is 90% of the total fees payable is lesser than the payment from the stage 1 to 5

### **Stage 6– Construction– Split Up**

At the site 6 when we split up in see what all the percentage of fees when architect can get form the client at every point of scheme will be listed here

1. On completion of 20% of work– 70% of the total fees payable less payment already made at stages 1 to 6a
2. On the completion of 80% of the work– 85% of the total fees payable less payment already made at stage 1 to 6 as we see before
3. So on the virtual completion 90% of the total fees will be payable less payment there already made from 1 to 6 stages

These are the general reports like completion reports, Occupation reports, As-built drawings, fees payable should be withheld with the client. So general reports will be scheduled of payment at stage 1 and stage 2 and stage 5 to 6 and stage 7 what will be the cost, this will be the things on rough cost estimate at the stage 1, preliminary cost at the stage 2 to 4, accepted tender cost 5 to 6 and actual cost should be paid at the stage of 7. So these are the scale fees payment more and when we talk about the more COA has prescribed professional charges under the architects under the regulation 1989. So stipulate the minimum mandatory scale of the professional charges with the intention of making the client fully aware of the fees.

### **Fee Structure**

These is how the architecture is paid fees, the fees structures will be the percentage amount which can be further studied as a minimum payable fees, negotiation fees and social fees, lump-sum fees and consultancy fees. So minimum will be as per the clients can give the architect as a token of gift

- Negotiable Fees– For works containing in the Indian Rupees like 14L or the profession fees between the client and architect for any amount
- Social/Slum Housing– In a view of its importance fees are negotiable
- Lump-sum will be like the client will be frozen to contractors
- Consultant fees will be that fees can be paid in the consultant amount

### **Fee Structure–Detection**

So this is how the detection will be use of the materials, curtailment of architectural services. So fees structures will be other taxes and charges. The client shall reimburse the following actuals

- The fare of outstation visits
- Lodging
- Cost of prospecting everything should be include at this stage

### **Scale of Fees**

So this is how the scale of fees will be going, this is how the payment of mode is happening to the architect at different stages shall be through check with proper deductions in terms of ST,TDS and retention. So this is how the

scale will be for you can see do it at anytime I think with the housing cost all the projects of cost anytime you can check with this data where which person should be getting at what stage in this is

### **Terms and Constructions of Engagement**

This is how the terms of engagement will be looking like for example starting from the name box to the amount you should be playing worked like worked where like this such much amounts should be filled and once you're done , your done with your amounts of terms and conditions of the engagement.