



ARCHITECTURAL DESIGN PROCESS GUIDE

This guide aims to help the client understand the process of design and working with an architect. There are typically six design phases which is a breakdown of our design services. Each of the six phases has a distinct purpose. After each phase, you as the owner will be required to make key decisions that will drive the design. A project is designed one decision at a time, therefore it takes time.

THE SIX DESIGN PHASES

In general, the phases are sequential and you as the owner will sign off on the completion of each phase, permitting the project to move forward based on the decisions you made up to that point. The timeframe to complete each phase varies depending on the complexity of your project.

Here are the typical six phases:

- Phase 1 - Pre-Design
- Phase 2 - Schematic Design
- Phase 3 - Design Development
- Phase 4 - Construction Documents
- Phase 5 - Pricing
- Phase 6 - Construction Observation

BILLING & FEES

We use the same phases to determine fee breakdown and billing. Payments of design fees are actually made monthly as the project progresses. These payments are based on the amount of work completed in that particular month. Architectural fees are not paid upfront or in one big lump sum.

Our design fees are set after the Pre - Design phase. The fees will be determined in the beginning of a project as either a fixed fee or an hourly fee with an estimated number of hours to complete. The total fee is then divided into the individual phases by percentage of the total fee (for fixed fees), or as an estimated number of hours per phase (for hourly fees). These types of fees are favorable because they give our clients an understanding of what the design fee will be from the beginning of a project, helping to avoid surprises down the road.

All projects are different therefore, our design fee varies from project to project depending on the following factors:

- Project Complexity
- Project Type
- Project Location
- Project Size
- Project Quality
- Scope of Services
- Owner's Schedule
- Owner's Budget

PHASE 1 : PRE-DESIGN

GOAL: Research and determine the owner's program.

FEE BREAKDOWN: 30% of total fee (retainer)

This is the phase where we determine what the owner's needs and wants are. There are typically 2 types of owners. An owner with most of the pre-design criteria established and needs a little bit of help to polish their program. An owner that needs our experience and researching capabilities to help them properly and efficiently determine their project requirements.

PRE DESIGN SERVICES:

Programming

Programming is a step where the client provides the architect with a list of requirements for the project design objectives, size & space requirements. The architect will use this list to establish the size, location, and relationships between all the spaces.

Budget Analysis

There are 2 kinds of cost in a given project; hard costs and soft costs. Hard costs are construction related costs including material, labor, and the contractor's overhead and profit. Soft costs are non-construction related costs including the designer's fee and expenses, consultants fees, city fees, bank fees and interest, and etc. During this phase, we generally assess if the budget is adequate to complete the project given project type and quality.

Schedule Development

The following are just a few of the factors that contribute to the project schedule:

- Owner's schedule & decision timet
- Designer's schedule
- Consultant's schedule
- Project complexity
- Permit process
- Contractor's availability

Because of all the various factors involved in the schedule, it is important to continually adjust the schedule as the project proceeds.

Code Analysis

It is important to understand the rules that will govern the project before starting the design. Researching and understanding codes is critical to preventing costly errors.



CONSULTANTS NEEDED

Most projects require that the owner hire consultants during pre-design to prepare the following two documents:

1.) Site Survey

A map depicting the boundaries, topography, utilities, and existing buildings on a particular site.

2.) Soils Report/Geotechnical Investigation

Soil borings and laboratory tests performed to determine the strength, compressibility and other characteristics/conditions of the soil of a site. This type of report is more frequently required in hillside or coastal areas.

END OF THE PHASE

The pre-design phase officially ends when the owner signs off on the approved program, budget, schedule and other necessary decisions discussed. This may be done in a form of project proposal initiated by the architect.

PHASE 2: SCHEMATIC DESIGN

GOAL: Graphically explore design options using the criteria established in Pre-design. Then present these options to the owner and narrow them down to one preferred concept.

FEE BREAKDOWN: 20% of total fee

COMMENCING DESIGN

Schematic design typically begins in rough form as sketches, floor plan studies, elevations or rough 3d models. Several owner/designer meetings are typical during this phase to make decisions and determine a design direction.

DOCUMENTS

At the end of this phase, it is common to have some of the following documents:

Site Plan

A drawing depicting the buildings location & relationship with the site.

Floor Plans

Drawings of each floor showing the Size, locations and adjacency of the various rooms/ functions.

Elevations

Drawings of appropriate building sides to convey conceptual design direction for the project.

Sections

Building cut through drawings depicting the heights and relationships of the various floors and roof.

Rendering and 3D Model

3D renderings or model depicting the conceptual look of the building.

Preliminary Cost Estimate

A rough estimate of the cost of construction based on the current building design. (Usually done by the selected general contractor. This can be deferred after the Design Development Phase)

The preceding list of drawings may still be rough in nature at the end of this phase. Their intent is primarily to help determine a design direction with which to proceed into the next phase.

END OF THE PHASE

The schematic design phase officially ends when the owner signs off on the drawings, giving approval of the design directions, appropriate revisions and notice to proceed to Design Development Phase.

PHASE 3: DESIGN DEVELOPMENT

GOAL: Refine and/or redevelop the design to incorporate design decisions made. Implement the various systems into the building.

FEE BREAKDOWN: 10% of total fee

FINALIZING THE DESIGN

The design development phase typically includes finalizing the size of the various rooms & spaces, refining the look of the project, selecting exterior and interior materials, appliances, door and window types, fixtures, appliances, etc. This phase may also include several owner/designer meetings which are critical to finalizing design decisions so that the detailed documentation can commence in the next phase.

INTERIORS

One common question that arises is what level of interior design do we provide as part of our basic services. We typically design everything that is built-in to the project. This includes basic cabinetry and finish materials. This does not include furniture or stand alone light fixtures. If you would like a detailed interior design services, we are happy to work with you and be a part of the process at an additional cost. We can also collaborate with the interior designer of your choosing.



SYSTEMS CONSULTANTS

It is during this phase that the systems consultants begin to design and draw up their portions of the work. It is our job to coordinate the work of these various consultants, implementing their drawings into the overall design of the project.

DOCUMENTS

At the end of the design development phase the previously listed documents from the schematic design phase should be updated in further detail. In addition, it is common to also have the following documents:

Key Interior Elevations

Drawings depicting the vertical relationship and material choices of the project's interior rooms.

Reflected Ceiling Plans

Drawings of the ceiling depicting locations of lighting, equipment, & level changes.

Interior Schedules

A detailed list of the type and location of interior finishes.

Door & Window Schedules

A detailed list of the type, size, graphic appearance and location of all of the doors and windows in the project.

Key Details

Large scale technical drawings of specific elements within the project.

Drawing requirements varies with each project. May include structural, civil, electrical and mechanical drawings.

END OF THE PHASE

The design development phase officially ends when the interior and exterior design of the building is locked in by the owner and architect. The owner will sign off on the drawings, giving approval of the design and notice to proceed to Construction Documents Phase.

PHASE 4: CONSTRUCTION DOCUMENTS

GOAL: to prepare the technical written and graphic documents that set forth the requirements for constructing the project and obtaining government agency approvals.

FEE BREAKDOWN: 25% of total fee

INSTRUCTIONS FOR BUILDING

The construction documents phase involves adding a level of detail and technical information to the design documents such that a contractor has a set of instructions with which to build the project as designed. This set of instructions is to show the intent of the designer and not to dictate means and methods, which the contractor is responsible for. This phase may also include several owner/designer meetings. This phase is more about the designer and consultants working through the technical aspects of the project.

PERMITTING

It is during this phase that the project is submitted to the local building department for what we call plan check. Plan check is the process by which the various city agencies review the submitted documents for compliance to the codes.

The owner will be required to pay a fee to the city when the documents are submitted to plan check. The timeframe for this process varies depending on your project's size, complexity and the speed of the local jurisdiction.

After the various agencies review the project, they will return the documents with comments/corrections.

Every project has some level of corrections. This does not mean that the work was done improperly. The designer and consultants will then fix the corrections and resubmit the documents for a second review. If the submitted documents then meet the agencies approval, the owner will be allowed to pull a permit to construct the project.

DOCUMENTS

At the end of the design development phase the previously listed documents from the schematic design and design development phases should be updated in full detail. Additional documents will also be created as part of this phase and can vary greatly depending on the scope of the project. A completed construction document set is highly technical and can be quite extensive. Those unfamiliar with the industry will often have a difficult time understanding these types of drawings.

END OF THE PHASE

The construction document phase typically ends when the permit is pulled and construction begins. However, sometimes a permit is pulled before all of the construction documents are complete since not all of the documents are required to obtain a permit.



PHASE 5: PRICING

GOAL: to assist the the owner in the selection of a contractor to build the project.

FEE BREAKDOWN: 5% of total fee

THE CONTRACT DOCUMENTS

This pricing phase will often overlap with one of the other phases depending on the method of selecting the contractor. It is important to note that the documents prepared by the designer and consultants in the construction documents phase are actually considered to be contract documents. They are a contract that the owner will hire a contractor to perform. In addition to the documents, there is an actual contract that must be signed between the owner and the contractor. The designer can help the owner to determine the type of contract to be used.

CONTRACTOR SELECTION

When it comes to hiring the contractor the owner typically has two choices:

1.) Bidding

Involves making the set of documents available to two or more contractors who then submit a bid to the owner with how much it will cost to build the project including the contractor's fee. The owner can then select whichever bidder they want, even if they are not the lowest.

2.) Negotiation

Involves selecting a contractor based on qualifications, capabilities and/or referrals.

WHICH METHOD IS BETTER?

There are positives and negatives to both processes. Eitherway, it is important to determine the method of contractor selection early on in the process.

Typically, we go for the Negotiation route with residential projects.

END OF THE PHASE

The construction procurement phase typically ends when the contractor is selected and has signed a contract with the owner.

PHASE 6: CONSTRUCTION OBSERVATION

GOAL: to observe the construction of the project to make sure the project is conforming to the design intent required by the client. Assist the owner with contractor payment requests. Handle requests for changes during construction.

FEE BREAKDOWN: 10% of total fee

THE OWNER'S AGENT

During the construction observation phase the designer will act as the line of communication between the owner and contractor. Once the project construction commences it is important to keep the designer involved in the project to assist the owner with the following tasks:

Observation Services

The designer will visit the construction site at appropriate intervals to observe the work for general conformance to the construction documents.

Evaluate contractor requests for payment

Assist the owner in processing payments to the contractor by visiting the construction site to determine if the particular work described in the payment request has actually been completed.

Process submittals

Review shop drawings, product data and samples for general conformance to the design intent.

Review results of tests and inspections

Keep the owner informed as to the progress of tests and inspections during the construction process.

Supplemental documentation

The designer can provide supplemental documents to clarify design intent for the contractor.

Handle requests for changes

The contractor, designer, or owner may need to change something during construction. The designer can administer this process and prepare the necessary construction document revisions.

Resolve claims between the owner and contractor

The designer acts as the mediator between the owner and contractor if a dispute arises. This is the first and least expensive step to conflict resolution during construction.

Punch List

The punch list takes place when the contractor states that they are finished with construction. It is the contractor's punch list and we aid the contractor by walking the site and pointing out items that do not meet the drawing standards.

Administer the project close out

Assist the owner with the various processes and steps that occur as construction ends.

END OF THE PHASE

The architect stays on the project until the the building is finished. Final inspections are all completed, and the owner obtains a Certificate of Occupancy.



READY TO MOVE FORWARD WITH YOUR PROJECT?

Here are things you can do now to make the design process more efficient.

Create a program

Programming entails discovering the client's needs and goals and getting them down on paper in either written and/or graphic format. This can be as simple as simply writing your space requirements, classifying them as wants and needs, and collecting photos to be used as project inspiration. It could also be as specific as stating requirements for natural light, views to the outdoors, noise concerns, or proximity to other rooms in the house, emotional expectations for how the space will feel and function, room sizes (square feet). Talking about the types of materials you want to see in the design, the size of the house, and maybe the way your current home meets or fails to meet your needs will give insight as to how your project will come together.

After having a rough program, we will meet to discuss the perceived requirements and dig deeper. There is often a need to 'translate' perceived needs into actual needs. It is important to have an open and honest conversation with your architect about budget, space requirements and overall expectations. Often, clients will discover that some of their desires or needs are in direct conflict with their budget or other goals.

If you need guidance with creating your program, we are more than happy to work with you in establishing your project requirements.

Collect Project Information

As early as now, try to collect essential information such as; plot plan, deed restriction and requirements, soil reports, floor plans & as-built drawings.

We prefer to do the as-built measurements and drawings for our clients. This enables us to see design opportunities and existing conditions that could create design issues.

FREQUENTLY ASKED QUESTIONS:

How much time will it take to design a new house, a building renovation or an addition?

The time to begin every project is unique. Your project size, it's complexity, the physical site conditions and your aesthetic preferences are just a few of the elements that make your project unique and therefore the time required to design your project can vary. In many cases a new build, addition and renovation will take anywhere from six months to a year to complete the design and working drawings required for a building permit. On the other hand, a small project such as a kitchen, dormer addition, or master bedroom suite renovation would take much less time.

What is a strategy for keeping my project on budget during construction?

Avoid making changes during construction. Once the general contractor begins building, resist the impulse to make changes to your project or be prepared for the implications. A simple request to move a wall one foot further might require revised structural engineering, new unforeseen consequences to other spaces, permit revisions, additional construction time and more fees to your architect and general contractor.

Be involved in your project. By staying on track with decisions and participating in the site meetings, you will make meetings more efficient and productive. When outstanding decisions are on the table, someone on the team is not moving and that could result in unanticipated delays to another player on the team.

Who will hire the contractor and other consultants?

We typically let the owner hire their own contractor. We act as the owner's representative. This way, payments and negotiations can be made directly with the specific company.

Why should I hire an architect?

Employing an architect to provide you with professional design services can help you in numerous ways.

An architect will analyze the zoning and land use codes where your project is located and determine if the project you envision is permissible by code. By identifying limits early in the game, you are able to move forward with creative ideas that respect boundaries and efficiently utilize the knowledge that your architect is providing.

Your architect will be able to work with you on creative solutions that address such topics as style, proportion, light, balance and rhythm so that your new design is pleasing to the eye and unified with regard to the overall composition. If you are renovating an existing structure, there might be elements in place that will impact the design. And, if you are building new, you'll have the site to inform you of guiding principles for your design.

Your architect will have the technical knowledge required to document and submit your building design to the building department in order to obtain your building permit.

During construction, your architect will be able to visit the site and observe if the building is progressing according to the design on your behalf and provide any answers to the General Contractor as the structure is being built.