

Working with your Architect

THE DESIGN PROCESS

Tuvia Poliskin RA
Update June 2020

You've taken the first courageous step toward making a piece of architecture by daring to engage in the act of giving shape and form to your dream.

Before you hire your architect to bring forth your dream into reality, you should take the time to become familiar with the design process and the role you and your architect will play in this unfolding process. The working relationship between you and your architect is crucial to the fluidity of the design process, and ultimately the success of your project.

Hiring a well chosen architect (see: Selecting an Architect) whose vision is aligned with your aspirations and objectives will ensure your dream is fully realized. Together, you will embark on a creative journey, which will culminate in a built legacy that both of you can be proud.

WHAT ARE YOUR ROLES?

You might have started collecting design ideas, developing a wish list, contacting the city and listening to experiences of family, friends and/or colleagues, who have gone through the design and construction processes. There is a lot of value to be gained from hearing others' experiences and insights, and most will be good, however you might hear the occasional nightmare story as well. If you do come across one of these, treat it as a valuable cautionary tale by listening and measuring it carefully, so that you can learn how to avoid a similar scenario.

Don't let a negative story frighten you; turn it into a reminder to be vigilant in your due diligence before you begin the design process. Unforeseen issues and problems will arise, this is a given. However, the more information and knowledge you have gathered before you begin, the more informed you will become, and consequentially less likely to encounter substantive problems. As your diligence grows, so will your confidence to proceed on this creative journey.

You define your needs, desires and objectives, which your architect then absorbs and translates into a custom design suited just for you. Your architect will act as a conduit, filtering all your parameters along with other influential factors affecting the project. Throughout the design process, your architect will synthesize all these requirements into a unified design, with the intent of resolving all competing forces, while fulfilling your aspirations and objectives.

Design is a time-based endeavor, and as such, the amount of service and support you want from your architect is determined by what you value, as well as what you can afford. The specific architectural services provided will be defined in the agreed scope of work. Once there is a clear understanding between you, the design process can begin.

WHAT IS THE PROCESS?

The design begins with you. You are the catalyst that initiated this creative journey and your architect will function as your guide and translator along the way. Before you enter into the design process your architect will prepare a project schedule to outline and manage the design process efficiently.

You may have already begun evaluating your needs, desires and objectives for your project. This is the beginning of establishing the architectural program that will generate the guidelines and requirements for your architect to respond to and design for.

Throughout the design process, there will be an ongoing dialogue between you and your architect; from macro to micro considerations, to numerous decisions which need to be made in order to achieve a well conceived design that meets your objectives, while integrating all other requirements.

Your architect will present you various ideas, solutions and alternatives, which you need to review and critique 'what works and does not work for you'. Together, you will formalize a design that resolves your concerns and finally reflects your values and vision.

There are standard phases to the design process, with minor variations that most projects adhere to. It's up to you and your architect to determine which phases, along with their associated drawings and information, will be necessary for your project.

STANDARD DESIGN PHASES

Phase 1

Feasibility Study: Defining What is Possible

Collecting and analyzing critical information and data such as: budget, resources, schedule, planning ordinances and building codes to make sure the proposed project is possible within your parameters and within the restrictions set forth by the AHJ governing agencies.

Phase 2

Programming: Formalizing Criteria List

Establishing a written document that outlines the quantitative and qualitative elements that the project needs to contain. This is your wish list articulated in a concise manner which clarifies your needs, desires and objectives.

Phase 3

Existing Conditions: Recording As-Builts

Whether your project is a renovation, remodel, addition or new construction this phase is essential. This phase will document environmental conditions, existing infrastructure and record the existing plans of the site and building for use in developing the design documents to follow.

Phase 4

Schematic Design: The Discovery Begins

Ideas and concepts that give form to your programmatic objectives. Through sketches, drawings, renderings and digital 3D models and/or physical models, the design begins to materialize. Your architect will determine which mediums will

best illustrate the design so that you can fully comprehend and virtually inhabit the emerging design. The goal of this phase is for you to be able to visualize the overall form and feeling of what the design will become.

Depending on the complexity of the design problem and the array of possible solutions, your architect will develop multiple options for you to review, critique and choose from. The schematic phase will set the overall size, form, configuration, spaces, adjacencies and character of the design.

Phase 5

Design Development: Working it out

The documentation begins for building permit approval and construction. The architect(s) attend to the refinements and adjustments of the schematic design, integrating all required building codes, systems, materials and construction methodologies necessary to build the design. This documentation will also include general finish materials and specifications.

At this stage in the process your architect should be confident that the design fulfills your program, is within a reasonable margin of your established budget, and is achievable within the municipal planning restrictions, that they do not foresee any major impediments to the permit approval and constructability.

At the completion of this phase, a set of drawings is produced, which should be sufficient to solicit preliminary construction estimates and submit for a building permit. This is called a 'permit set', and is the minimum construction drawing set required for approval by the planning and building departments to secure a building permit. This is the minimum your architect is required to provide, the quantity of information and documentation beyond the permit set will vary depending on your needs and agreement with your architect.

Phase 6

Construction Documents:

Dotting the i's and crossing the t's

After the permit set, there are still a lot of unresolved details, non specified materials, finishes and fixtures, which allow for possible misinterpretation, and may lead toward the project

not coming out the way you envisioned. This can also cause inaccurate and escalating construction costs. To alleviate these potential problems, it is recommended that a complete set of comprehensive drawings with specifications and written instructions be completed.

These construction documents will describe what is to be built, the quality of the project, how contractors are to be selected, and how the contracts for construction will be written and administered. With a complete set of construction documents you are able to solicit accurate construction bids that account for all details, materials and specifications of the design.

Complete Construction Documents:

- Bidding requirements (invitation to bid, information and instructions to bidders; bid forms; and requirements for bid security)
- Contract forms (the form of agreement to be used between owner and contractor, forms for bonds and certificates)
- Contract conditions (the general conditions of the contract for construction, which outlines the rights, responsibilities, and duties of the owner and contractor as well as others involved in the construction process, including architect; supplementary conditions particular to the project)
- Specifications (outline the levels of quality, manufactured products and the standards to be met in the construction of the project)
- Drawings (includes architectural, structural, civil, mechanical, plumbing, electrical, landscape, interior design, and other specialty drawings)
- Addenda (additions to any of these documents issued by the architect during the bidding or negotiation process)
- Contract modification (orders for minor changes of work, construction change directives, and change orders)

Note: The Contract Document forms the legal agreement between you (the owner) and the contractor. They include all of the construction documents except the bidding requirements.

Phase 7

Bidding & Construction Administration: Building the design

This critical stage brings the project to fruition and finally into physical form. Your architect can help you select a contractor and assist in the bidding and negotiations of construction contracts (see: Selecting a Builder). During construction, your architect will work with you to make certain that every decision is the best and most informed decision possible so that the construction meets the quality and intent delineated in the construction documents.

Your architect will review the contractor's application for payment and verify that the work was completed in accordance with the drawings and specifications of the construction documents. It is important to note that adjustments and changes will occur during construction, it is the nature of building. Being aware of this, and prepared with your architect by your side, will alleviate many potential conflicts. Your architect will be able to resolve problems with solutions that achieve the intent of the design, while making sure the fluidity of the construction process is not interrupted.

PERSISTENCE AND PATIENCE

Now you have an overview of the design process with its associated phases, which I hope will empower you as you move forward.

Very few have the good fortune to enter into this creative process that will result in a project specifically designed for their own use. Persistence and patience will serve you well as you navigate the design and construction process, always keeping in sight your end goal.

This endeavor takes a considerable amount of time, effort and resources; therefore, you have earned the right to have a joyful, exciting and rewarding design and building experience.

So now, imagine what can be and go create your dream!

About

Tuvia Poliskin is a practicing architect in Washington, California and Indiana with 30 years experience in AEC Industry. He has taught and written on subjects ranging from Principles and Elements of Design, Building Systems, Building Code and Professional Practice.

Notes: