

The Phases of Design ... or, how an idea becomes a building

Pre-design

The beginning of the process: gathering information. In this first phase we develop the project "program." The program defines the who, what, where, when, and how of the project. We learn about the site, and the goals and desires of the client, and with this information we create a document that describes the project – spaces, sizes of spaces, relationship of spaces to each other, character of space, relationship of the prospective building to the site, and possible ranges of cost. We also begin to identify performance goals for the project, relating to solar opportunities, energy efficiency, and environmental impact.

Schematic Design

In this phase conceptual design ideas are explored, with drawings and sometimes models. The drawings begin with simple diagrams, looking at different building forms on the site plan, and progress into floor plans that convey the relationship of defined spaces and possible building shapes that respond to the building program and site conditions. Often several design concepts are explored, before the client and architect reach an agreed-upon design scheme.

Design Development

Here we take the schematic design, and "develop" it further, refining the design concept and creating the drawings that will later become the construction documents. The budget is again discussed, and an opinion of probable costs is often developed. Many decisions are made in this phase, such as window and door configurations, construction methods, and the selection of interior and exterior building materials. Also, performance characteristics are more fully explored, including a detailed energy analysis of the proposed design.

Construction Documents

The design development drawings are further refined into detailed drawings and specifications, which the contractor will use to establish actual construction cost and build the project. These documents become part of the building contract and will be used to obtain necessary permits and guide the construction process. Specifications define the materials and construction methods, and systems of the building, as well as any special features, such as renewable energy applications.

Bidding and Negotiation

This is when the homeowner selects a contractor. Typically we offer recommendations of several contractors we feel are qualified and suited to the particular project. Sometimes a project is actually bid by several contractors, from documents we prepare, and sometimes the homeowner pre-selects a single contractor (through interviews) and the contract is arrived at through a negotiated bid. In either event, the project costs are defined by the contractor and a contract is signed between the Owner and the Contractor.

Construction Administration

The contractor is responsible for construction methods, techniques, and construction schedules, as well as building according to all codes. During construction, we continue communication with both the owner and the contractor, to help make sure that the project is built according to the plans and specifications. Sometimes we assist the owner by reviewing the contractor's payment requests and verifying project progress. We make periodic site visits, often at the contractor's request, to address questions and conditions that arise during construction.