



The best way to begin a new project is for you—the owner—to reflect on what you bring to it.

As owner, you bring a great deal to your project: knowledge, experience, needs, desires, aspirations, as well as biases. You also bring the resources to realize your expectations.

Every owner, however, starts in a different place. Some have had vast experience with design and construction; they know what they want and how to go about getting it. Many owners have much less experience.

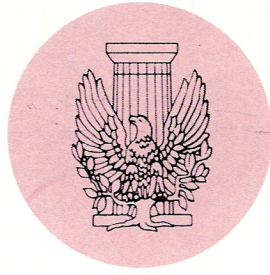
Whatever your situation, it makes sense to begin with some self-examination to assess what you already know about your project and what you will establish with your architect's help. The questions outlined here can be used as a guide.

You don't need firm or complete answers to these questions at this point. Indeed, your architect will help you think them through. A general understanding of where you are, however, will help you select the best architect for the project.

- What activities do you expect to house in the project? Are you ready to translate these activities into specific spaces and square-footage areas, or will the "program" emerge in working with the architect?
- Has a site been established, or is this

decision, too, a subject of investigation with the architect?

- Have you, or perhaps others, fixed a construction schedule or budget?
- What are your design aspirations? What thought have you given to the design quality or amenity you are seeking in this project?
- What are your overall expectations from this project? What are your basic motivations as a client, and what role does this project play in achieving your overall aims?
- How do you make decisions? Will a single person sign off on recommendations? Are committees necessary?
- How much information do you need to make decisions? Do you require a lot of detail?
- How bold do you expect to be? Do you wish to push design or technology to the limit? Is the project experimental?
- Do you have the resources to do this project? Where will they come from, and what strings may be attached?
- How much experience do you have in design and building? Have you done this before? If so, where have you been successful, and where were you disappointed?



SELECTING THE ARCHITECT

Whether you are building your own home or designing a commercial complex, choosing the right architect is important to a successful project.

Architecture firms come in a variety of sizes and types. The statistically average firm is made up of nine or 10 people; many firms are smaller (with as few as one or two architects), and there are some very large firms with staffs of 100 or more. Some firms specialize in one or more project or facility types; others do not. Some firms include in-house engineering (civil, structural, mechanical or electrical) or other design disciplines (planning, urban design, landscape architecture or interior design); many other architects introduce these disciplines into their projects through appropriate consultants. Each architecture firm brings a different combination of skills, expertise, interests and values to its projects.

The Right Architect

First-time clients, and even experienced clients facing new situations, have many questions about architect selection. Some of the more common ones are addressed here.

▼ *When, in the life cycle of a project, should I bring the architect into the picture?*

▲ As early as possible. Architects can help you define the project in terms that provide

meaningful guidance for design. They can also do site studies, help secure planning and zoning approvals and perform a variety of other predesign tasks.

▼ *Should I look at more than one firm?*

▲ Usually, yes. The exception, of course, arises when you already have a good relationship with an architect and it makes little sense to change.

▼ *How do I find potentially suitable firms to contact?*

▲ Contact other owners who have developed similar facilities, and ask whom they interviewed and ultimately selected. Ask who designed buildings and projects that you've admired or that seem especially appropriate. Many local chapters of the American Institute of Architects have lists of firms.

▼ *What information should I request?*

▲ At minimum, ask prospective firms to show you projects that are similar to yours (that is, of similar size and type) or that have addressed similar issues (that is, similar siting, similar functional complexity, similar design aspirations). Ask them to indicate how they will approach your project and who will

be working on it (including consultants). Ask for the names of other owners you can contact.

▼ *Why are formal interviews desirable?*

▲ An interview addresses one issue that can't be covered in brochures and printed materials: the "chemistry" between the owner and the project team. It also allows the owner to investigate how each architect will approach the project.

▼ *How many firms should I interview, and how should they be selected?*

▲ Most people advise that you interview between three and five firms, enough to see the range of possibilities but not so many that an already tough decision will be further complicated. Select for interview architecture firms you feel can do your project because of their expertise, their experience or their ability to bring a fresh look to your situation. Treat each firm fairly, offering, for example, equal time and equal access to your site and existing facilities. Insist on meeting the key people who will work on your project.

▼ *What can I realistically expect to learn from an interview? How can I structure the interview to make it as informative as possible?*

▲ You can learn how the team the architect has put together will approach your project. Ask how the architect will gather information, establish priorities and make decisions. Ask what the architect sees as the important issues or considerations in the project. Evaluate the firm's interest in your project: Will your needs be a major or minor concern? Evaluate the firm's style, personality and approach: Are they compatible with yours?

▼ *How should I follow up?*

▲ Tell each firm what you intend to do next and when you plan to make your decisions. If you haven't talked with past clients, do so now. Assess both the performance of the firm and the performance of the resulting architecture. You may want to visit existing buildings to see them in use. Notify the selected firm as soon as possible. Remember, conditions change; the firm may not be able to offer the same project team if you must take several weeks or months to decide.

▼ *On what should I base my decision?*

▲ Personal confidence in the architect is pre-eminent. Then seek an appropriate balance among these factors: technical competence, professional service, cost and, of course, design ability. Once you've selected the best firm, enter into detailed negotiations of services and compensation. If you cannot agree, begin negotiating with your second choice.

▼ *Some say that I should select a builder or contractor before selecting an architect. When is that good advice?*

▲ It works best to select an architect first; then you will have help in understanding how to make the builder or contractor an effective member of the building team.

However architect selection is approached, it is worth taking the time to do it well. Some additional guidance:

- You are engaging the services of a professional. You will work closely with the architect through the life of the project, and your relationship may extend to future projects. Invest at least the care it takes to select a financial or legal adviser.
- Yours will also be a business relationship. Find out how prospective architects do business, how they work with their clients, how responsive they are to your management and decision styles, and how well their work

stacks up against their clients' expectations. The best way to find out is to talk with other owners for whom the firm has provided professional services.

- Ask questions. Respect the architect as a professional who will bring experience and specialized knowledge to your project. At the same time, don't be afraid to ask the same questions you've asked yourself: What does the architect expect from the project? How much information does the architect need? How does the architect set priorities and make decisions? Who in the firm will work directly with the client? How will engineering or other design services be provided? How does the firm provide quality control during design? What is the firm's construction-cost experience?
- Be frank. Tell the architect what you know and what you expect. Ask for an explanation of anything you don't understand. The more on the table at the beginning, the better the chances for a successful project.

Selection Is a Mutual Process

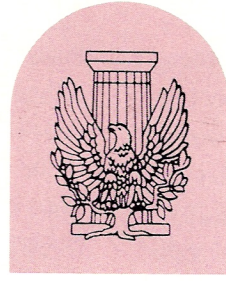
The most thoughtful architects are as careful in selecting their clients as owners are in selecting architects. They are as interested in a successful project as you are, and they know that good architecture results from fruitful collaboration between good architects and good clients.

Design as a Condition of Selection

What problems do you create when you ask an architect to design a project as a condition of selection?

Even "simple" projects are very complex. Each situation is different — different people, different needs, a different site, different financing and regulatory requirements. Many of the owner's requirements and expectations become specific only in design; as the project proceeds, needs and priorities are clarified and new possibilities emerge. The architect's knowledge, experience and skill become part of the project, and contribute still more possibilities. These facts suggest that back-of-the-envelope designs done as part of the architect-selection process cannot substitute for the complex, time-consuming and intensive dialogue and inquiry that characterize architectural design.

In some cases, owners know just what they need. If you feel you are one of those owners, seriously consider engaging an architect on, for example, an hourly consulting basis to review and test your decision. Detailed professional evaluations of existing buildings can be valuable in uncovering problems and possibilities that may affect your decision. An "off-the-shelf" product may not fulfill your specific requirements. The process of adapting an existing building design to a new site may be more complicated than it appears, considering, for example, soil or drainage conditions, solar orientation, views, traffic and community issues.



IDENTIFYING THE SERVICES YOU NEED

You may already know the scope of professional services required for your project, but most owners want to work with their architect to find out what is needed.

Different projects require different combinations of architectural services. An early task is to identify those services essential to the success of the project.

The Important Choices

Most projects require a set of basic services typically provided by architects: preliminary (usually called schematic) design, design development, preparation of construction contract documents (drawings, specifications, invitations for contractor proposals, construction contract agreements); assistance in the bidding or negotiation process, and administration of the agreements between you and your builder or contractor.

Some projects, however, require other services. Predesign work may be essential: for example, facilities programming, surveys of existing facilities, marketing and economic feasibility studies, budgeting and financing packages, site-utilization and utilities studies, environmental analyses,

planning and zoning applications, and preparation of materials for public referenda. Projects may also require special cost or energy analyses; tenant-related design; or special drawings, models and presentations.

Not all services need be provided by the architect. Some owners have considerable project planning, design and construction expertise and may be fully capable of undertaking some project tasks themselves. Other owners find it important or necessary to add other consultants to the project team to undertake specific tasks; here, discussion will be necessary to establish who will coordinate owner-supplied work or other services provided outside the architect's agreement.

There are two effective approaches to establishing services:

- The first is to establish a set of *basic services*, a standard set of services common to many projects. When you use this approach, a second category of *additional services* is used to cover predesign services and a wide variety of special studies or services that some projects require, like those mentioned above.

- The second is to use the *designated services* approach, which asks owners and architects to select an appropriate complement of services from an array developed by the AIA and presented here.

The AIA publishes standard owner-architect agreement forms for both of these approaches. AIA Document B141, Owner-Architect Agreement, and its short-form version B151, Abbreviated Form of Owner-Architect Agreement for Construction Projects of Limited Scope, embody the basic services approach. AIA Document B161, Owner-Architect Agreement for Designated Services, and its companion B162, Scope of Designated Services, can be used to implement the designated services approach.

Deciding on Services

The best strategy is to sit down with your architect and to identify the services needed. Some advice:

- Use the AIA's list of designated services as presented on pages 8 and 9 as an initial discussion guide; doing so provides a chance to talk about all possible services.
- Recognize that additional services may be required once you are under way. You may require zoning approvals or you may wish to do economic analyses of an intriguing new energy-saving system.
- Set aside a design contingency budget under the joint control of owner and architect to fund design changes or omissions once construction begins.
- Don't skimp on construction contract administration services, that is, observing the construction work for conformance to drawings and specifications; processing the contractor's shop drawings, materials and product samples; reviewing the results of construction tests and inspections; evaluating contractor requests for payment; handling requests for design changes during construction, and administering the completion, start-up and close-out process for the

owner. It is important that you get the building that was designed.

- Most disputes that arise do so during construction. Consider how you will handle such disputes. The AIA standard agreement forms include an arbitration procedure in which both parties submit their claims to binding arbitration under careful rules. You may also want to consider a mediation process (in which the parties resolve the dispute with the help of a neutral mediator) as a first step to forestall the time and expense of arbitration.
- Include a postconstruction evaluation of the building in the agreement; perhaps a joint inspection by owner and architect six months after the building is occupied to see if it is being used and maintained appropriately.
- Finally, allow the project to guide the choice of agreement form. The designated services approach is more complicated, for it forces an up-front decision to include, or not to include, every possible service. Designating services, however, brings discipline and clarity to the process of deciding who will do what. It identifies *all* the services needed to do the project, and it allows the architect to develop a compensation proposal that is appropriate to the responsibilities being assumed.

What If There Are Too Many Unknowns?

Sometimes too little is known about the project to intelligently pin down professional services and thus to proceed to a contractual agreement with the architect. If this is the case, engage the architect to provide project definition and other predesign services first, with remaining phases and services to be determined later.

LIST OF DESIGN SERVICES

Listed here are two kinds of services offered by architects: **BASIC SERVICES** (indicated by ●) which are required for most projects and **ADDITIONAL SERVICES** (indicated by ○) which may or may not be relevant to your particular project.

PREDESIGN		DESIGN		
1	2	3	4	5
<i>Predesign Services</i>	<i>Site Analysis Services</i>	<i>Schematic Design Services</i>	<i>Design Development Services</i>	<i>Construction Documents Services</i>
○ Project Administration	○ Project Administration	● Project Administration	● Project Administration	● Project Administration
○ Disciplines Coordination Document Checking	○ Disciplines Coordination Document Checking	● Disciplines Coordination Document Checking	● Disciplines Coordination Document Checking	● Disciplines Coordination Document Checking
○ Agency Consulting Review/Approval	○ Agency Consulting Review/Approval	● Agency Consulting Review/Approval	● Agency Consulting Review/Approval	● Agency Consulting Review/Approval
○ Coordination of Owner-supplied Data	○ Coordination of Owner-supplied Data	● Coordination of Owner-supplied Data	● Coordination of Owner-supplied Data	● Coordination of Owner-supplied Data
○ Programming	○ Site Analysis and Selection	● Architectural Design/ Documentation	● Architectural Design/ Documentation	● Architectural Design/ Documentation
○ Space Schematics/ Flow Diagrams	○ Site Development Planning	● Structural Design/ Documentation	● Structural Design/ Documentation	● Structural Design/ Documentation
○ Existing Facilities Surveys	○ Detailed Site Utilization Studies	● Mechanical Design/ Documentation	● Mechanical Design/ Documentation	● Mechanical Design/ Documentation
○ Marketing Studies	○ On-site Utility Studies	● Electrical Design/ Documentation	● Electrical Design/ Documentation	● Electrical Design/ Documentation
○ Economic Feasibility Studies	○ Off-site Utility Studies	○ Civil Design/ Documentation	○ Civil Design/ Documentation	○ Civil Design/ Documentation
○ Project Financing	○ Environmental Studies and Reports	○ Landscape Design/ Documentation	○ Landscape Design/ Documentation	○ Landscape Design/ Documentation
○ Project Development Scheduling	○ Zoning Processing Assistance	○ Interior Design/ Documentation	○ Interior Design/ Documentation	○ Interior Design/ Documentation
○ Project Budgeting	○ Project Development Scheduling	● Materials Research/ Specifications	● Materials Research/ Specifications	● Materials Research/ Specifications
○ Presentations	○ Project Budgeting	○ Project Development Scheduling	○ Project Development Scheduling	○ Special Bidding Documents/Scheduling
	○ Presentations	● Statement of Probable Construction Cost	● Statement of Probable Construction Cost	● Statement of Probable Construction Cost
		● Presentations	● Presentations	● Presentations

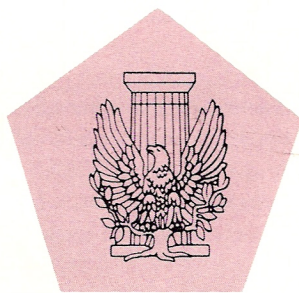
PROVIDED BY ARCHITECTS

As an owner, you will find it helpful to review this chart with your architect to acquaint yourself with the phases of the design and construction processes and the available services. With that knowledge you will best be able to work with your architect to select those services appropriate to your special needs.

CONSTRUCTION		POST	SUPPLEMENTAL	
6	7	8	9	
Bidding or Negotiations Services	Construction Contract Administration Services	Post-Construction Services	Supplemental Services	Supplemental Services (cont'd)
● Project Administration	● Project Administration	○ Project Administration	○ Special Studies	○ Leasing Brochures
● Disciplines Coordination Document Checking	● Disciplines Coordination Document Checking	○ Disciplines Coordination Document Checking	○ Renderings	○ Expert Witness
● Agency Consulting Review/Approval	● Agency Consulting Review/Approval	○ Agency Consulting Review/Approval	○ Model Construction	○ Computer Applications
● Coordination of Owner-supplied Data	● Coordination of Owner-supplied Data	○ Coordination of Owner-supplied Data	○ Life Cycle Cost Analysis	○ Materials and Systems Testing
● Bidding Materials	● Office Construction Administration	○ Maintenance and Operational Programming	○ Value Analysis	○ Demolition Services
● Addenda	● Construction Field Observation	○ Start-up Assistance	○ Quantity Surveys	○ Mock-up Services
● Bidding Negotiations	○ Project Representation	○ Record Drawings	○ Detailed Construction Cost Estimates	○ Still Photography
○ Analysis of Alternates/Substitutions	○ Inspection Coordination	○ Warranty Review	○ Energy Studies	○ Motion Pictures and Videotape
○ Special Bidding Services	○ Supplemental Documents	○ Postconstruction Evaluation	○ Environmental Monitoring	○ Coordination with Non-Design Professionals
● Bid Evaluation	● Quotation Requests/Change Orders		○ Tenant-related Services	○ Special Disciplines Consultation
● Construction Contract Agreements	● Construction Change Directives		○ Graphics Design	○ Special Building Type Consultation
	○ Project Schedule Monitoring		○ Fine Arts and Crafts Services	
	○ Construction Cost Accounting		○ Special Furnishings Design	
	● Project Closeout		○ Non-Building Equipment Selection	
			○ Project Promotion Public Relations	

KEY

- Basic Services contained in AIA's standard owner-architect agreement (AIA B141)
- Additional Services contained in expanded list of services (AIA B161/B162)



NEGOTIATING THE AGREEMENT

Owner-architect agreements spell out what both you and the architect bring to and expect from the professional relationship.

The formal agreement between owner and architect is an opportunity to assure that both see the same project before them and that both agree on requirements and expectations. Before committing these requirements and expectations to paper, take a look at the five steps presented here and address any that may have been missed.

1. Establish Project Requirements

Write down your project requirements as either a short statement or a very detailed compilation. Address these points:

- Project scope: What is to be designed and built?
- Project site: Where will (might) it be built?
- Levels of design quality and amenity
- Role of the project (in the owner's life, business, community, etc.)

- Schedule requirements or constraints
- Target date for completion
- Budget estimate and sources of financing
- Codes, regulations, required design reviews

2. Describe Project Tasks and Assign Responsibility for Each One

Owner and architect should identify the predesign, design, construction and postconstruction tasks that must be undertaken to achieve the project's goals. The chart on pages 8 and 9 taken from AIA Document B162, Scope of Designated Services, provides a starting point. Both should then identify who will carry out each task.

Advice: To help produce a complete schedule, include all necessary tasks, even if they will be done by others (say, a regulatory agency's review).

3. Develop a First-Cut Schedule

Place the tasks and responsibilities on a time line, estimating duration for each task. Identify the tasks that, if delayed for any reason, will delay the completion of the project.

Compare the time line with the target completion date and adjust one or both as appropriate.

Advice: Owner, architect and other key actors who must live with the project schedule should be involved in developing it.

4. Take a Critical Look at the Results

Is the schedule reasonable, particularly given the project's requirements and budget? Have you allowed each actor enough time to do the work? Have you allowed yourself enough time to review the architect's submissions, to seek your own recommendations and approvals, and to make your decisions? Many project schedules don't provide enough time for decision making.

5. Use This Planning Work as a Basis for Establishing the Architect's Compensation

Ask the architect to provide you with a compensation proposal that is based on the tasks and schedule outlined above.

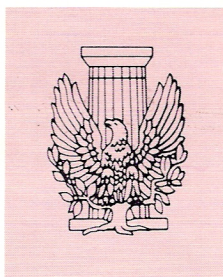
The Owner-Architect Agreement

If you've done your homework, the written agreement should follow without difficulty. Although a certain amount of negotiation is inevitable, you and the architect should be of common mind on the key issues of project scope, services, responsibilities, schedule, construction budget and the architect's compensation. Some advice on this subject:

- Use a written contract. No handshake is firm enough to reach all the understandings about the different roles and obligations the owner and architect will carry out.
- Feel free to use AIA documents. These standard forms of agreement, first developed by the American Institute of Architects in

the 1880s, have been carefully reviewed and modified over the years. They are widely used and they present a current consensus among organizations representing owners, lawyers, contractors, engineers and architects. They are "coordinated" to fit together; for example, the Architect-Consultant Agreement serves as a subcontract for the Owner-Architect Agreement; and the Owner-Contractor Agreement, usually negotiated later, extends the architect's services into the construction phase.

- If you want to modify the AIA forms, do so with great care. Since these forms are precoordinated, even simple revisions in one agreement may cause complications in another.
- Do not expect your architect to warrant or guarantee results. Perfection is a shared but unrealistic ideal; it can no more be attained in design and building than it can in any other complex human pursuit.
- Consult your legal counsel before signing these agreements.



COMPENSATING YOUR ARCHITECT

*Appropriate professional compensation is important to meeting
your goals; cost and value go hand in hand.*

Experienced clients recognize that adequate compensation for the architect is in their best interest as it assures the type and level of service needed to fulfill their expectations. You may have questions about how to arrive at the appropriate compensation for your project; some of the more frequent questions are answered here.

▼ *How much should I expect to pay an architect?*

▲ That will relate to the types and levels of professional services provided. The more service you need and the more complex or experimental the project, the more you should budget for architectural services.

▼ *What methods of compensation are available?*

▲ These are the most common:

- A stipulated sum based on the architect's compensation proposal

- A stipulated sum per unit, based on what is to be built (for example, the number of square feet, apartments, rooms)
- A percentage of the construction cost
- Hourly rates
- Combinations of the above

▼ *My project is one characterized by repetitive units (beds, rooms, apartments). Does it make sense to use these units as a basis for compensation?*

▲ Sometimes, for example, when the probable number of units (or alternatively, the highest and lowest probable numbers) is known.

▼ *Percentage of construction cost has been a simple and popular method of compensation. Is it recommended?*

▲ It depends. It is simple in concept. It requires, however, a rigorous determination of what "construction cost" includes and does not include. The result may be too high or too low given the complexity of the project and the professional services needed to accomplish it. Finally, this method may

penalize the architect for investing extra effort to reduce construction cost on behalf of the owner.

▼ *What does a stipulated sum include?*

▲ This is a matter of negotiation with your architect, but generally it includes the architect's direct personnel expenses (salary and fringe benefits), other direct expenses chargeable to the project (such as consultant services), indirect expense or overhead (costs of doing business not directly chargeable to specific projects) and profit.

▼ *When does it make sense to consider hourly billing methods?*

▲ Again, this is a matter of negotiation, but it makes special sense when there are many unknowns. Indeed, many projects begin this way, continuing until the scope of services is determined and it is possible to establish a stipulated sum. It may also make sense to use this approach for construction contract administration and special services, such as energy and economic analyses.

▼ *What are reimbursable expenses?*

▲ These are out-of-pocket expenses incurred by the architect on behalf of the project that usually cannot be predicted at the outset, such as long-distance travel and communications, reproduction of contract documents, authorized overtime premiums and the cost of professional liability insurance. Detailed in the Owner-Architect Agreement, usually they are outside the stipulated sum or hourly billing rate, and usually they are billed as they occur.

▼ *What about payment schedules?*

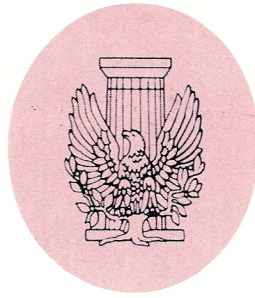
▲ Once the method and amount of compensation have been established, ask the architect to provide a proposed schedule of payments. Such a schedule will help you plan cash requirements for the project.

▼ *What other expenses can the owner expect?*

▲ The Owner-Architect Agreement outlines a number of owner responsibilities, some of which will require financial outlay. These include site surveys and legal descriptions; soils-engineering services (for example, test borings or pits); required technical tests during construction (for example, concrete strength tests); an on-site project representative, and the necessary legal, auditing and insurance counseling services needed to fulfill the owner's responsibilities.

▼ *What happens if owner and architect cannot agree on compensation?*

▲ Keep talking, so that each understands the other's basis for negotiation. Often, differences result from incomplete or inaccurate understandings of project scope or services. Perhaps some services can be performed by the architect on an hourly basis or by the owner. Perhaps coordination of owner forces, special consultants or other actors mandated by the owner is adding to the architect's costs. When everything is mutually understood and there is no closure on compensation level, both the owner and the architect have no choice but to discontinue negotiation.



KEEPING THE PROJECT ON TRACK

*Both you and the architect can take specific steps to help meet
your quality, time, and budget goals.*

Design and building are group activities. Many people and firms come together to do a project; they may not have worked together before and they may not work together again. They collaborate to produce a complex and usually unique result on a specific site. As the project unfolds, hundreds of individual design decisions and commitments are made. Needs and conditions change, and work is modified. A strong and healthy relationship between owner and architect is essential to keep the project on track.

Recognizing the Owner's Responsibilities

The Owner-Architect Agreement provides clear guidance on what is expected of the owner. AIA Document B141 outlines several responsibilities; your architect will assist you in clarifying them. The owner must provide:

- Design objectives, constraints and criteria, including space requirements and relationships, flexibility, expandability, special equipment and site requirements

- Budget (including contingencies for bidding, changes in the work during construction and other costs that are the owner's responsibility) and a statement of available funds for the project
- A legal description and survey of the site (including available services and utilities) as well as soils-engineering services and professional recommendations (including test borings or pits, soil-bearing values, percolation tests, air- and water-pollution tests, ground-water levels)
- Necessary services during construction, including testing services and (on some projects) an on-site project representative
- Timely information, services, decisions and approvals
- Prompt notification of any observed faults or defects in the project, or nonconformance with the contract documents governing the project
- Legal, accounting, auditing and insurance counseling services needed to fulfill the owner's responsibilities

Recognizing Some of the Fundamental Realities of Building

We spend more than \$300 billion annually for new construction and renovation in the United States; tens of thousands of individual projects are launched and completed each year. Architects and their clients have had the opportunity to gain some collective wisdom from these projects — wisdom that may be of value in project planning and follow-through.

Project scope, quality and cost are inextricably related. Any two of these variables can be fixed and controlled in design; the marketplace takes care of the third. You will need to establish priorities among them and set acceptable ranges for each one.

A good architect challenges the program, schedule and budget. Even when these have been developed through painstaking effort, it is in the client's best interest to encourage this challenge. In this way, the architect comes to understand project requirements. The analysis may also reveal existing or potential problem areas.

As design proceeds, important issues will surface. The architect's services bring increased client understanding of the project. As a result, the project changes. Each milestone, usually the end-of-phase submissions written into the Owner-Architect Agreement, should be used to assure continuing consensus on project scope, levels of quality, construction cost and budget. It may also be necessary to adjust the services required from the architect at these points.

The secret to successful projects is effective project management by both owner and architect. A summary of what the owner can do to keep the project running smoothly through design and construction is presented here.

Project Plan. Insist on a project work plan, preferably as part of the process of negotiating the project agreements. Ask that the plan be updated on a regular basis and after any major change in scope, services or schedule.

Team Member. Be part of the project-planning process and all project meetings. Be sure that your own deadlines, as well as your own decision processes, are reflected in that plan.

Client Representative. Identify a single person to represent you and to speak for you at planning sessions and project meetings. The scope of the client representative's authority should be understood by all involved.

Internal Coordination. If yours is an organization where several people or departments must be involved in the project work, make it clear that the client representative speaks as the boss. Conflicting advice or requirements will inevitably cause problems later.

Meetings. Plan on regular meetings of the project team and participate in them. Meetings should have clear agendas. Persons with assigned tasks should have them done in time for meetings. Be sure the architect prepares minutes that clearly identify what was decided, what items now require decision making, and who is responsible for next steps. Minutes should be circulated to all team members.

Documentation. Require that contacts between architect and client (for example, phone conversations, data-gathering sessions) be documented, with the results shared with appropriate members of the project team. This system keeps everyone informed of what's being discussed and decided outside of formal project meetings and presentations.

Phases. The AIA standard forms of agreement designate three major design phases and submissions by the architect: schematic design, design development, construction documents. You may wish to include additional submissions, recognizing that each adds time and cost to the project. Use these milestones to review what has been done and to approve it as the basis for moving forward.

Decision Process. Be sure that both you and your architect understand the process by which you will make decisions: Who requires what information, who requires whose approval before deciding, how much should be allocated for review of submissions. Diagram the process if you are unsure.

Decisions. Make decisions when they are called for. Keeping the project “on hold” while you decide increases the possibility of changes in conditions that may upset the delicate balance between project time, cost and quality. Long or indefinite delays may force the architect to assign key team members to other projects.

Agreement Modifications. Keep the Owner-Architect Agreement up-to-date. Modify it when project scope or services are changed.

Questions. When you have questions, ask them. Pay particular attention to design submissions, for the work of each phase is further developed in the next. Look at these submissions carefully and ask about anything that is unclear or incorrect. All questions should be cleared up before the construction contract documents phase begins; changes after this point will most likely cost you time and money.

Problems. Address problems when they arise and before small ones become large ones. Regular project meetings provide a natural opportunity.

Bringing the Builders on Board

At some point, the project team must be expanded to include the firm or firms who will build the project. There are two basic approaches:

- The owner may select the contractor or contractors based on the construction contract documents. Public owners generally must engage in an open competitive bidding process. Other owners may choose open competitive bidding, competitive bidding by a few invited firms, or negotiation with a single selected contractor or builder.

- The owner may choose to include the contractor as a member of the design team. Usually the builder is paid a fee for consultation during design; a stipulated sum for the construction work is negotiated when the design is detailed enough to serve as a basis for a cost proposal.

However and whenever builders are selected, it is likely that the architect will assist in preparing the bidding documents and the Owner-Contractor Agreement forms as part of the construction contract documents.

It is good practice to engage the architect to assist in the bidding or negotiation process and to recommend construction contractors.

Maintaining the Professional Relationship

The architect's services should not end with the awarding of the construction contracts. It is highly advisable to retain the architect to:

- Observe the construction work, evaluating it for compliance with the construction contract documents and helping to determine that the project is being built as designed. This service is especially important in today's liability climate, where the contractor's failure to construct what has been designed can have major consequences for the owner.
- Review shop drawings (detailed drawings of specific building components or assemblies submitted by the contractor) as well as material and product samples to confirm the contractor's understanding of the design intent.
- Make design changes that result from owner decisions, design omissions or unexpected conditions in the field.
- Provide a variety of other important services for the owner during this time, checking contractor payment requisitions against the progress of the work, providing final inspections and certifications for the owner, and assisting with building start-up and user education.

Continuing the professional relationship enables the architect to serve the client's interests and goals throughout construction and initial occupancy of the project.