

Superior Service and Expert Workmanship.

Project Basics 101

Project Team

The Owner

The Owner means the Owner or the Owner's representative. He has the right and responsibility to request and approve contracts connected with the work, require contract bonds from the contractor, approve the proposed surety, inspect the work as it proceeds, approve and make payments to the contractor for accepted work performed.

The Owner can approve and direct changes to the work in the absence of a project architect or engineer. However, the Owner must not intrude on the direction and control of the work. By doing so, the Owner may assume responsibility for the accomplished work as well as become liable for any negligent acts committed by the contractor during the course of construction.

The Owner usually has the right to stop the work or to terminate the contract and carry out the work, or to terminate the contract and carry out the work himself depending on the signed contractual requirements. It is critical that the Owner understands his rights in a contract document.

Architect/Engineer (A/E)

The Architect and the Engineer perform the design of construction projects. Building construction is primarily of an architectural nature with support services provided by structural, electrical, and mechanical engineers as the project warrants.

The A/E Team can provide a host of services for the Owner including value engineering, building analysis, consultative work, project design, preparation of specifications and bidding documents, drawings and forms of agreement.

During a project, the A/E can act as the Owner's representative and as a point of control and liaison between the Owner and the Contractor. The Architect can consult and advise the Owner as well as inspect and approve the Contractor's work. He also can help solve project disputes or interpret conflicts in contract documents.

It is important that the duties of the A/E are clearly defined prior to the execution of a contract with the Owner. It is also important that the duties and role of the A/E are clearly defined with respect to the Contractor. These conditions should be understood prior to the execution of an agreement between the Owner and his A/E.

Project Team

Contractor

The Contractor is that entity that brings together all of the diverse elements and inputs of the construction process into a single and coordinated effort. This effort is performed within the terms of a written and enforceable contract.

In its simplest concept the Contractor executes an agreement with an Owner to provide goods and services for which he received payment. Depending on the scope of the project, the Contractor's responsibilities and duties will vary. In general, the Contractor usually provides project supervision and management, labor and/or materials, and equipment to complete the work as defined in the contract documents.

The Contractor is bound by the terms of the contract documents and the project specifications. Straying from these documents puts the Contractor in possible jeopardy for retrieval of payment as well as the assumption of additional liabilities.

It is important that the Contractor is aware of his rights and has clear understanding of the specifications before he enters into a contract with an Owner.

Specialty Contractor

The Specialty Contractor is a person or organization that performs a specific type of work within the construction industry on a regular basis.

This focused area of performance, in combination with current available technologies, quality materials, and true knowledge of the particular industry, can create an organization that can be a great asset to an Owner.

Specialty Contractors can operate in the role of a Prime Contractor with the Owner or as a Subcontractor to a General Contractor. This is usually determined by the scope or variety of work that is involved with the contract and the financial stability of the Contractor.

Specialty Contractors can also provide consultative and cost estimating services within their area of expertise for the Owner, General Contractor, or the Architect/Engineer.

Project Development Process

Identifying Problems/Sources of Concern

A good inspection program helps the Owner establish the need for maintenance, identify the causes of problems, and prescribe appropriate maintenance and repair procedures.

Regularly scheduled inspections of structures can detect small problems before they cause major damage and require costly repairs.

The Owner should make a visual inspection of the exterior of his building and talk to the tenants of the building to see if they are experiencing any problems. A visual inspection should be taken of the exterior skin to see if there is any cracking or shifting of the masonry, any aluminum flashing out of line on the coping, or around the windows. The Architect/Engineer and Specialty Contractor should perform the same basic inspection as the Owner can do from the ground.

If the Owner would like either of the two groups to hang a stage, they could give him a written report on the true condition of his building, with pictures or marked drawings at cost to the Owner.

Project Development Process

Repair Recommendations

Once the problems are found or located and the Owner recognizes there are problems, the Owner can either hire the Architect/Engineer or go to the Specialty Contractor for their recommendation for repair. A list of the problems to be repaired should be made and a priority made with a rough estimate on the costs for the repairs.

The Architect/Engineer or Specialty Contractor should base their recommendations on the industries' latest standard of repair methods for each type of repair that must be made to the building. Then a meeting should be made with the Owner to discuss the above recommendations.

Selecting Proper Materials

Prior to preparing the specifications for the performance of the work, it is necessary to determine from the types of the repairs that are to be made the performance level of the materials that will be needed. Once this performance level has been recognized and measured, if possible, then the selection of the proper materials to meet these requirements can be made.

There are many different ways to determine the performance of the various products and sometimes it is extremely difficult to measure the characteristics of one product to another. Therefore, it becomes very important to solicit the assistance of a knowledgeable Specialty Contractor or Material Representative that can provide assistance in selection of the proper materials for particular applications.

It is important to be aware of the interplay between different materials and/or chemicals and the potential adverse reactions that may occur, if applied improperly or at the wrong intervals of time. One must also take note of various building components or items near and around the building, which may become affected if specified materials are used improperly, or without caution.

Prepare Specifications

The preparation of specifications occurs after all of the problems have been identified and it as a compilation of the necessary recommendations for repairs with the selected materials. This is all presented in combination with the execution portion of the specifications, which is the section that describes how all of the work items are to be performed and how the materials are to be used.

The Architect/Engineer can readily prepare specifications either for competitive bidding processes or solely for negotiated uses, usually on a fee basis. Certain consultants or Specialty Contractors are also capable of providing these specifications sometimes on a fee basis or as part of a negotiated or design-build project.

It is important to realize that there are many "canned" or standard specifications available and readily used in the industry. This standard average may not be applicable to each individual building and it becomes very important for the Owner and the specifier to determine what is or is not pertinent in order to provide a clear and focused specification, which will benefit all parties on the project.

These project specifications then become the written guideline and usually are a part of the form of agreement that dictates how the project will be performed and what items will be completed.

It is important to remember that any deviation from the specifications without mutual agreement by all parties may result in the assuming of any liabilities associated with the deviation by the party that made the change. It is this situation that can undermine the most well planned or thought out project and usually leads to a difficult closing out of the job.

Job Progress & Inspections

Execution of the Work

Once a specification has been completely prepared and a contractor has been chosen and contracted, the actual performance of the work takes place.

The Contractor performs the work listed in the specifications only, unless these specifications are modified by an agreed upon change order executed by the Contractor, the Owner and the Architect/Engineer, if all are involved. It is the responsibility of the Contractor to adhere strictly to the specifications and to complete the job in a timely manner.

The Owner and the Architect should each appoint a person of responsibility or authority to act on behalf of that party throughout the entire contract process. This helps to speed up all levels of communication and decisions, which minimizes the communications problems that prevail on construction projects as well as eliminating or minimizing project delays. It is important during the construction phase that the contract documents are adhered to strictly by all parties of the contract. There should also be sufficient project documentation briefly describing what work items were performed and what materials were used in order to provide a documented history for improvements or repairs to an existing structure. These are extremely useful when one investigates a structure to determine that operations, if any, had been performed in the past.

Inspection & Approval

The Owner or the Owner's agent, if one is assigned, is ultimately responsible for the approval or non-acceptance of completed work items. At the end of a project, the Owner should inspect the completed work with the Contractor to locate any project deficiencies and catalog these items for corrective measures.

The Contractor is responsible for making sure that the work is performed according to the contract documents and that any and all deficiencies are corrected. Once an inspection of the work has been performed and the correction of all deficiencies are complete, the Owner and Contractor should jointly execute a completion notice, thereby recognizing the fact that the project is complete. This will serve as record for release of final payments as well as the start of warranty periods.

Contracting Methods

Competitive Bidding Methods

Contractors can compete with one another for construction contracts by submitting proposals to the Owner designating a price for which they will do the work. The Owner then selects the bid of the Contractor that is the most advantageous from his point of view.

The Contractors prepare their bids from a set of specifications so that there is a fair chance for all that are competing. It is very important that a clear set of specifications are prepared so that the Owner receives good comparable bids for his use in evaluation of the bids.

The Contractor then performs only that work that was in the specifications unless a change order has been executed by all parties thus authorizing a change to the project documents.

The competitive bidding process is meant to encourage efficiency and innovation by Contractors in order to produce work of the specified quality at lowest possible cost.

Contracting Methods

Negotiated Method

Instead of open competitive bidding, there are times that are greatly advantageous for the Owner to negotiate a contract for his project with a pre-selected Contractor or a small group of Contractors. There are a wide number of types of negotiated contracts because such agreements can include many different provisions that are mutually acceptable to both parties and that may be best suited for the type of work involved.

After the Owner performs a study, which includes the reputation, experience, financial stability, dependability and ability to perform the work of one or more candidates, a contract is then negotiated between the selected Contractor and the Owner.

Normally this type of contract is limited to privately financed work because competitive bidding is usually required for publicly funded projects except under unusual circumstances.