

OWN.01

Financial Administration of Construction Contracts by Owners

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In the commercial world, it is a given that owners (business and government entities) have businesses to run and that is their number one priority. Construction is merely a necessary means to that end. Because owners are not engineering or construction experts, contracting construction, rather than performing the work themselves, is the preferred thing to do. But what about construction contract administration? Should that be contracted or self-performed? To best answer these questions, we need to understand what contract administration means.

WHAT IS CONTRACT ADMINISTRATION?

Contract administration means to manage or supervise the execution, use, or conduct of a binding agreement between two or more parties. To better understand this, it is helpful to recognize two primary tasks of contract administration: operational administration and financial administration. Operational administration primarily involves overseeing the actual construction to ensure that the assets are built to the owner's specifications, and that the assets function properly and are available for use when scheduled. The documents of primary importance include the project manual, drawings, specifications, and schedules: that is, all documents necessary to execute and manage the project.

Financial administration involves overseeing financial matters associated with the project including all financial provisions included within the contract document itself. Additionally, owner financial administration includes protecting against fraud and performing financial audits as appropriate. The documents of primary importance include the contract, subcontracts, the budget, pay applications and other supporting records: that is, all documents required to control and record the project's cost consistent with the provisions of the contract.

Although these brief explanations of operational and financial administration of contracts are very simplistic, both tasks are very complicated and each activity, to be performed effectively, requires a considerable amount of skill, experience and expertise. Failure to properly administer the operational aspects of a contract may result in inadequate facilities, defects, delays, etc. Failure to properly administer the financial requirements of contracts may result in over-payments, cost overruns, fraud and other financially

unpleasant consequences. Given the complexity of both of these administrative tasks, and the lack of expertise of most owners, what other options do owners have?

USING ARCHITECTS AND THEIR STANDARD CONTRACTS

Financial administration of construction contracts by owners can begin with the use of the owner's architect. Since commercial construction is the primary business of architects and contractors, architects led the development of standardized architectural and construction contracts. The American Institute of Architects (AIA) maintains a library of these standard contracts and they have gained wide acceptance throughout the United States. Some most frequently used contracts are listed in table 1.

Owner capital improvement projects typically involve two basic contracts. The first is with the architect (AIA Doc. B141-1997), and the second is with the general contractor or construction manager (AIA Doc. A101-1997, AIA Doc. A111-1997, or AIA Doc. A121/CMc and AGC Doc. 565).

THE STANDARD CONTRACT WITH ARCHITECTS

AIA Document B141-1997, Standard Form of Architect's Services, Design and Contract Administration indicates, in the very first sentence, "The Architect shall manage the Architect's services and administer the Project." While this is a valuable service offered to owners, it is frequently misunderstood and mismanaged by owners.

For example, the architect cannot administer, for the owner, the architect's own contract—thus the wording "shall manage the architect's services." Owners must recognize they still have to administer the architect's contract to assure themselves that the architect has performed the contracted services, and the architect's billing rates, reproduction costs, reimbursable expenses, travel costs, change orders, etc. are properly verified to ensure correct payments are made. Owners must make sure they understand the standard language in the contract and discuss responsibilities with the architect as it relates to the architect's "administration of the project."

Table 1—Frequently Used AIA Standard Contracts

AIA Document ID	Title
AIA Doc. B141-1997	Standard Form of Agreement Between Owner and Architect with Standard Form of Architect's Services
AIA Doc. B141-1997	Standard Form of Architect's Services: Design and Contract Administration
AIA Doc. A101-1997	Standard Form of Agreement Between Owner and Contractor where the basis of payment is a STIPULATED SUM
AIA Doc. A111-1997	Standard Form of Agreement Between Owner and Contractor where the basis of payment is the COST OF THE WORK PLUS A FEE with a negotiated Guaranteed Maximum Price
AIA Doc. A201-1997	General Conditions of the Contract for Construction
AIA Doc. A121/CMc and AGC Doc. 565	Standard Form of Agreement Between Owner and Construction Manager where the Construction Manager is also THE CONSTRUCTOR

Some Standard Language in the Contract with Architects

Architects are trained and experienced at performing the operational administration of construction contracts and usually do so quite well. However, their training and expertise, not to mention their personal interest level or lack thereof, in dealing with financial administration of contracts may not be as well developed. Some specific language of interest in standard contracts is the following:

1. Article 2.1.7.2—" . . . the architect cannot and does not warrant or represent that bids or negotiated prices will not vary from the owner's budget . . . or from any estimate of the cost of the work or evaluation prepared or agreed to by the architect." While this language is entirely appropriate, owners must recognize that responsibility for the quality of the estimate ultimately rests with them. Care must be taken to recognize that the architect has a conflict of interest and may be inclined to agree to numbers that have more risk than an owner appreciates. Owners must recognize that architectural estimates are typically conceptual or parametric estimates. Such estimates have a variance of minus 20 percent to plus 40 percent or greater. The significance of this is that owners must ensure they have a quality bid process and that owners take an active role in the evaluation of bids. The bids, once accepted, finalize the owner's budget that will be used to manage the cost of the project.
2. Article 2.6.3.2—"The issuance of a Certificate of Payment shall not be a representation that the architect has . . . reviewed copies of requisitions received from Subcontractors and material suppliers and other data requested by the owner to substantiate the contractor's right to payment, or (4) ascertained how or for what purpose the contractor used money previously paid on account of the contract sum." If the architect does not accept responsibility reference "data requested by the owner to substantiate . . . payment" the owner must decide how to best respond to this and protect the owner's interests. Additionally, the owner must take action as required to obtain lien waivers and/or partial lien waivers.
3. Article 2.6.5.3—"With the owner's approval, the architect shall incorporate those estimates into a change order or other appropriate documentation for the owner's execution or negotiation with the contractor." Owners must recognize the architect is not required to validate change orders and ensure they have been priced as required by the contract. Architects are not experts on acceptable labor burden mark-ups and material pricing and may not understand what the owner

requires. The standard language leaves responsibility for validating/negotiating CO pricing to the owner.

4. Article 2.1.1—"The architect . . . and administer the project." Does this mean the architect will administer the construction contract? If so, does that mean operational administration and financial administration? Owners must understand exactly what services the architect will provide as he/she administers the project. Owners may alter the standard language in Article 2.1.1 to document more fully the financial administration responsibilities accepted by the architect.

These examples of the standard contract language with the architect should motivate owners to assess their internal risk tolerance levels and assign additional resources if needed to fully administer the construction contract.

USING STANDARD CONSTRUCTION CONTRACTS

These contracts are between the owner and the general contractor (GC) or construction manager (CM). As shown in table 1, three frequently used construction contracts are stipulated sum, cost of the work plus a fee (cost plus), and construction manager where the CM is also the constructor. The type of contract and its size impacts the amount of risk an owner may incur. Cost plus contracts involve more risks for owners than do stipulated sum contracts and the amount of effort required to administer a contract increases as risks increase.

To assess the amount of effort required, owners are encouraged to identify areas of highest risk including the bid process, labor burdens, etc.

IDENTIFYING OWNER HIGH RISK AREAS

Whether the owner plans proactive monitoring of contract financial requirements, relies on post-construction auditing, or both, the contract must provide reasonable protections. The financial administration of the contract must focus on high risk areas that may include, but are not limited to, the bid process, labor and labor burdens, change orders, construction equipment rental rates, bonds and insurance, contingencies and Allowances, lien waivers, and the right to audit.

Bid Process

Financial administration of the construction contract begins before the contract is even signed. The owner must decide on the type of construction contract that best meets the owner's need. Choices include, but are not limited to, the standard contracts shown in table 1 including stipulated sum, cost of the work plus a fee, and construction manager.

Architects may recommend and participate with the owner in the selection of the general contractor (GC) or construction manager (CM). This process may involve interviews and proposals that include hourly rates for GC/CM personnel, relocation allowances, insurance and bonding requirements, etc. Additionally, the owner may require the GC/CM to solicit bids

Table 2—Labor and Labor Burdens

Labor and Labor Burdens*	%	\$
Bare Direct Labor** (Individual)	100.00%	\$18.00
(Project level = Wtd. Ave. Actual Pay Rate, Including laborer, journeymen, foremen - if any.)		
Labor Burdens		
Statutorily (Required by law/statute):		
FICA (Social Security)	6.20%	\$1.12
FICM (Medicare)	1.45%	\$0.26
FUTA (Federal Unemployment)***	0.30%	\$0.05
SUTA (State Unemployment)****	1.30%	\$0.23
Worker's Compensation*****	4.00%	\$0.72
Subtotal Statutorily	13.25%	\$2.39
Employee Benefits (Employer Provided):		
Holidays	3.08%	\$0.55
Vacations	3.85%	\$0.69
Retirement (Pension, 401K, etc.)	5.00%	\$0.90
Group Medical/Dental/Vision	8.00%	\$1.44
Disability Insurance	1.35%	\$0.24
Accidental Death & Dismemberment (AD&D)/Life	0.20%	\$0.04
Subtotal Benefits	21.48%	\$3.87
Total Direct Labor	134.73%	\$24.25
*Percentages and dollar amounts are theoretical, actuals will vary depending on the contractors actual rates for statutorily and the extent they provide employee benefits.		
**Bare Direct Labor (BDL) is gross wages/salaries paid directly to individuals.		
***The Federal rate is 0.8% on the first \$7,000 paid each year.		
****State rates vary as does the base on which the rate is applied.		
*****This can vary significantly (2X, 3X, or more) depending on the job classifications and contractor experience.		

from subcontractors and include the Subs' responses in the GC's/CM's overall bid. A quality bid process for selecting subcontractors is essential. Bidders must be given quality data, appropriate bidding instructions, and adequate time to prepare and submit competent bids. The bid process should not be left entirely to the general contractor/construction manager. Owners should reserve the right to be involved.

Regardless of whether the owner is proactively involved as bidding occurs, sound financial administration requires that the contract provide owner access to all bid documents such as bidders' lists, requests for proposals, bid responses/proposals from both successful and unsuccessful bidders, and any and all other bid documents. These documents are necessary for auditing purposes. Additionally, owners should reserve the right to approve or disapprove bidders recommended by the general contractor/construction manager and to be present at the opening of the bids.

The GC/CM should not be allowed to submit bids in competition with subcontractors to self-perform selected packages of work. Doing so tends to discourage Subs from submitting serious bids since the Subs will expect the GC/CM to have a competitive advantage. Additionally, as with the Architect, the GC/CM can not administer, for the owner, a self-performed package of work without having a conflict of interest. If an owner wants to allow a GC/CM to self-perform some of the work, this is best done by sole-sourcing the work to the GC/CM and accepting responsibility for the contract administration of that package of work.

Labor and Labor Burdens

Since there is no universally accepted standard for what may be included as mark-ups (labor burdens) on wages (also known as bare direct labor or BDL) paid to construction workers, owners are at risk for billings that may not be allowed by the contract. All contractors include statutorily required items (social security, medicare, unemployment, etc.) and employee benefits (vacations, holidays, insurance, etc.).

In addition, many contractors include a factor for some amount of overhead and/or general conditions such as miscellaneous tools, safety training, drug screenings, etc. No two contractors mark up bare direct wages the same way. This inconsistency from contractor-to-contractor requires owners to be more attentive to the financial administration of labor and labor burden costs to ensure actual contractor billings are aligned with the requirements of the contract.

To better understand labor burdens one needs to understand bare direct labor (BDL). BDL is the cost of wages paid directly to each worker. For example, if a journeyman earns \$20.00 per hour his BDL is \$41,600/yr. (\$20.00 X 2080Hrs.). BDL is also referred to as Medicare wages since the Medicare rate of 1.45 percent is applied to all wages paid to individuals. Owners are encouraged to specify in bid instructions, and ultimately in the contract itself, specifically what mark-ups are allowed as labor burdens. A recommended standard for all owners is found in table 2.

These mark-ups are generally accepted as true labor burdens. By allowing these mark-ups and no others, owners can more effectively evaluate change order pricings and better manage all labor costs billed to their projects. Change orders should allow the pass-through of actual costs only (plus any agreed upon fee or profit) and standardizing labor burdens helps owners better manage CO costs across all contractors.

One more very important item with respect to labor mark-ups involves overtime wages. Payroll burdens applied to overtime wages should only be those burden items actually accruing liabilities from those wages. Typically, these are FICA and FICM only (once the unemployment thresholds have been met).

Change Orders (COs)

Owners must recognize that the pricing of change orders does not benefit from a competitive bidding environment and must be fully auditable. The owner's financial administrator should ensure that the standard AIA contract is modified to at least set forth requirements such as:

- All change orders will be reimbursed at actual cost plus an agreed upon percentage for overhead and profit. General conditions budgets should be adjusted on an exception basis (only on major COs and then as negotiated with the owner).
- Each change order shall include all costs required to perform the CO scope of work including labor, labor burdens, materials, overhead and profit, and mark-ups for insurance and bonds where required by contract.
- Since change orders are usually estimates, all significant material costs must be reconciled to actual costs once paid. Adjustments in the CO costs must be made as appropriate.

- The GC and/or the owner must evaluate all labor hours estimated to perform the CO scope of work. Their engineering experience and expertise should be used to accept and/or challenge the hours requested. This is the only opportunity for the owner to protect his interests with respect to labor costs since actual CO labor gets co-mingled with other work.
- The GC may be allowed a mark-up on COs as negotiated and specified in the contract.
- Labor burdens, overtime rates and rental equipment costs must be determined as set forth in other sections.

When possible, the owner should effectively manage COs against the requirements of the contract as the COs are submitted for approval versus waiting for an end-of-project audit.

Construction Equipment Rental Rates

Contractors use numerous types of equipment on construction projects. While some contractors may own the equipment they use, they may also rent items such as dozers, crawler tractor loaders, backhoes, boom mounted pneumatic breakers, cranes, etc. When the equipment is rented, owners should expect to pay fair rental rates. To reduce their risks in this area, owners should specify in the contract that costs of rental equipment be limited to the actual rent paid by the contractor and that generally not be greater than rates customarily prevailing in the locale.

Owners also should specify that contractor-owned equipment be billed to the project at rental rates not to exceed 75 percent of the prevailing rates in the local market. These rates allow contractors to fully recover their costs and, of course, they will receive the contract allowable mark-ups for fee or profit on the value of equipment as billed to the project.

Bonds and Insurance

Owners also should require performance and payment bonds. A performance bond is intended to protect the owner upon default of the contractor in the event that the contractor cannot perform (complete) the work. The payment bond is intended to protect the owner from mechanics' liens in the event the contractor fails to pay wages, subcontractors, and/or material suppliers. Both bonds are issued together by a qualified Surety doing business in the locale as specified in the contract. Traditionally, the bonds are issued for the full amount of the project.

Owner financial administration procedures should require that a copy of each bond be provided to the owner as scheduled and that the contractor provides satisfactory evidence of payment.

Sureties usually require monthly reports from the contractor that show the current and indicated total cost of the job. Once completed the surety will reconcile the final cost of the project versus the original budget and either bill or refund any balance due from/to the contractor. Thus contractors may apply the bond cost factor to both positive and negative change orders that impact the total cost of the work.

Owners typically require contractors to provide commercial liability insurance and worker compensation insurance as well as other types of insurance. Good financial administration requires that proper evidence of the required insurances is provided in a

timely manner. Contract provisions allowing the adjustment of prices billed the owner for insurance should be audited.

Contingencies and Allowances

Contingencies are amounts included in a project to provide for uncertainties, and unforeseen changes, which based on the owner's experience, will occur during the life of a project. Typically, these monies are intended to fund change orders that are not scope growth (increases in amount of work/services/equipment) related. Scope of work increases should be funded by additional appropriations (increases in the project's indicated total cost at completion).

Some contingencies may be assigned to specific project scope items. When those items have been completed, the contingency cost should be reconciled to the contingency allowance. If CO's did not consume the entire contingency, the remaining amount should be transferred to other project work still in progress or drawn down (change ordered to reduce the indicated total cost of the project) by the owner.

Allowances are monies that are included in the project for "known unknowns," such as allowances for lead paint and asbestos abatement. For example, some of the existing facility may be known to have both lead paint and asbestos, but the exact location and amount may not be easily quantified. Therefore an allowance covers these costs. Large projects may have many allowances. owner financial administration procedures should require an "audit tracker" report that will ensure all allowances are managed as needed and all under-runs are fully returned to the owner.

Lien Waivers

It is typical for owners to require partial and final lien waivers from the contractor. These are intended to provide additional protection to the owner. If partial lien waivers are required, financial administration procedures should ensure that they are submitted as required, usually with each pay application. Once the project is complete, the final lien waiver should be in-hand before final payment is made to the contractor.

Right to Audit

All construction contracts should have a "right to audit" clause. Even lump sum contracts are auditable as to quantities, quality, and specific performance i.e. bonding, insurance requirements, recordkeeping, schedule compliance, etc. A flow-down right to audit clause applicable to subcontractors, sub-subcontractors, and material suppliers should also be included. The contract should allow the owner or its designee the right to audit all of the contractor's records for a period up to three years after final payment, or longer if required by law.

Many owners also include a contract provision to specify that if the audit discloses over-billings of all types in an amount greater than 1 percent of the total contract billings, the general contractor will reimburse the owner for the cost of the audit in addition to refunding any over-billings actually paid.

Financial administration of contracts includes making sure the contract contains all necessary provisions to allow effective

auditing. The decision of whether or not to actually perform an audit, who will do it, and when it will take place may take into consideration the owner's experience with the architect and contractor as the work is performed.

The financial administration of construction contracts is important and requires both expertise and attention. This effort should be performed throughout the life of the project to prevent financial issues from becoming audit exceptions. Owners are encouraged to discuss financial administration with the architect and agree on what services the architect accepts responsibility for and will in turn provide, and each high risk area must be considered and appropriately addressed.

Owners must decide how best to protect their interests. If dedicated resources are not justified during the execution of the project, financial audits by a qualified professional should be performed as soon as practical. Such audits may be conducted at stages as the work progresses or may be completed at the end of the job. Owners do not necessarily get what they deserve. They get what they negotiate (and incorporate into the contract), audit and enforce.

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