

# Architects and Design-Phase Cost Estimates

## Design professionals should reconsider the value of third-party estimates

By John Coakley, CPE, LEED® AP, AVS

*Architects should in almost all situations engage independent estimators throughout design. In fact, third party design-phase cost estimates are so important, architects should sell the benefits of this service to their clients for both their benefit as well as the owner's.*

Professional cost estimators are widely used by architects during the design phases of a project to provide preliminary cost estimates. These estimates may begin at the conceptual design phase and are prepared at regular intervals through the construction document phase. Estimating professionals are frequently tasked with “selling” the importance of design-phase cost estimates to clients, both architects and owners. It is important to review and assess some of the common reasons or “excuses” why these parties choose not to obtain design-phase cost estimates. Certain reasons are of course justified, but most can be refuted with hard evidence and possibly a little common sense. After considering the validity of these reasons, the benefits of third-party cost estimators will be more apparent. Cost estimators hear these reasons time and time again only to later be informed about consequences due to cost complications. Architects should in almost all situations engage independent estimators throughout design. In fact, third party design-phase cost estimates

are so important, architects should sell the benefits of this service to their clients for both their benefit as well as the owner's. Below are some of the common excuses and their shortcomings, from the cost estimator's perspective. Excuses involve time, money, resources, and value-added benefits.

### “An Estimate Just Costs Too Much”

The value of design-phase cost estimates is significant considering the many benefits, particularly those which allow clearer evaluation of design options and total cost assessments. The cost of a series of estimates, on the other hand, is relatively insignificant – for example, say around one eighth to one quarter percent of the total construction cost of \$5 to \$10 million project, or not much more than several standard sets of doors. Compare how many times the quantity of doors changes on a project and the corresponding costs are normally not a significant consideration. Design team participants can conclude that the relative cost of design-phase estimates is actually very low.

### “Our Owner Client Will Not Pay for the Estimate”

Design-phase cost estimates are integral to the architect and owner on all projects especially given the unpredictability of construction market dynamics. While AIA typically only requires third-party cost estimates on larger projects (AIA B103™ 2007), the benefits of design-phase cost estimates are applicable to projects of all sizes. Why do the larger projects, those within university systems, and public projects generally require independent estimates? The answer is that this is the preferred method when costs are a serious consideration and beyond the scope of the architect's responsibilities and capabilities. The added benefits of an independent perspective are of such great value that all projects should capitalize on this and, in fact, prudent architects should sell this benefit to their owner clients. An enhanced peace of mind with regard to costs is and should be of primary importance to both the architect and owner.

**“Cost is Not Part of Our Responsibility” or “We Just Don’t Need an Estimate”**

Cost estimators are surprised how frequently this reason is given for not obtaining design-phase cost estimates. Frankly, this is just bad business. Not understanding cost and not designing to a specific budget is inexcusable. The absence of cost information during design will complicate the owner-architect relationship and bring about a multitude of subsequent issues. The evolution of a design is controlled by both design and cost considerations. A project over or under-designed is clearly more likely to occur without the benefits of ongoing, independent evaluation of costs. When the final bids are in, only then will the architect and owner realize their disappointment of not having had cost support during design.

**“A Contractor Gives Us the Cost Estimate for Free” or “We Have Really Good Relationships with Contractors”**

Contractors, of course, are very knowledgeable regarding construction means and methods along with associated costs. However, contractors generally will not do anything for free and, if they do, they will not be in business for long. They will be paid somehow. In addition, contractors are unlikely to provide cost estimates that can be truly used for design evaluation. Their motives are different, i.e. - what can they construct best, logistics of their crews and equipment, their current need of work, relationships with particular subcontractors and so on. This strategy is no better than fully trusting a car dealer to provide an accurate price on a new vehicle just for the asking. There is absolutely nothing wrong with having a contractor or construction manager on board at any given time, however, it is always to the benefit of an architect/owner team to have an independent cost assessment. Ultimately, if a contrac-

tor is honest and fair with cost predictions, third-party estimates - for a nominal fee - will reassure the owner that costs are in line. A competent cost estimator works in tandem, with limited conflict, alongside the design and pre-construction team. Cost conscious owners should fully understand and be comfortable with the potential costs before dispensing thousands or even millions of project fund dollars.

**“We Do Our Estimates In-House”**

This reason is a favorite from the perspective of professional cost estimators. Some architecture firms, especially the larger full-service A/E firms may have qualified estimators on staff. However, most architects do not and are by trade and desire focused on design. Typically the in-house estimator is someone who was doing design and has been pulled into estimating or is only doing estimating work part-time. The complexities of cost estimating today are substantial and a thorough understanding of numerous elements is essential. For example, these include construction means and methods, labor and materials pricing trends, estimate layout and detail as related to completeness of design documents, mark-ups given current market conditions, vendor contacts, location variables, productivity, and so on. In addition, professional cost estimators are involved in a variety of projects and all types of cost disciplines including architectural, structural, MEP, and specialized. Finally, estimators are trained in estimating, have efficiency advantages, are skilled in applicable software tools, may hold related certifications, and desire to provide this type of service. Bottom line is the professional cost estimator is hard to beat, even by a good estimator within an architecture firm.

**“Independent Estimators Just Provide a High Estimate Regardless”**

An experienced estimator will be able to routinely provide later con-

struction document phase cost estimates within plus or minus 5% of the eventual bid amount or medians. In highly competitive situations, the total eventual cost including change orders may need to be evaluated against the final estimate. Sure, even the best estimators are off occasionally, but if due diligence can be proven could anyone else have predicted the cost better...short of bidding the project? Look for estimators with sound references and those with a proven track-record of accurate estimates. Each assignment is unique and the professional estimator should evaluate each project given all special cost considerations. Anything less is just a boiler plate estimate and of little value to any party.

**“Our Project is Too Small”**

No project is really too small to evaluate costs. This applies especially in today’s market where cost savings are essential and imperative. An unusual dichotomy is the level of scrutiny an architect or owner will give a \$50,000 change order but they will not recognize the benefit of a cost estimate on a \$500,000 renovation project. In addition, consider the level of detailed analysis those contemplating a new car purchase put into their evaluation of true market costs and what others are paying. Clearly, a similar effort should be required when planning construction expenditures. The architect-owner team should evaluate costs as if funds are coming directly from their personal pockets.

A cost estimate, at a reasonable fee and appropriate level of detail, is important to any project, regardless of size.

A cost estimator with expertise is an integral and invaluable part of your design team. Given the above considerations, it should be apparent that there really are no valid reasons not to engage third-party estimators regardless of project size, delivery method, stage of design, or building type. The complexities of

today's economy, construction market, and ever changing dynamics make cost estimating a challenging process; certainly both an art and a science. Are you prepared to take this risk with known disadvantages or are you better off leaving this to the skilled professionals? Similarly, are you prepared to proceed through design without strong cost support? Hopefully the above considerations will make your future decisions easier with regards to third party estimates. Utilizing appropriate and expert cost estimators can only enhance your level of service protecting both the architect and owner. Your cost estimator can assess various design options, provide current real-world cost data, develop detailed cost estimates, and participate in value engineering exercises. When an owner spends significant funds on a project, they should to the extent possible be assured they are getting their money's worth. Only a skilled, independent cost estimator engaged on the behalf of the project team can truly provide this assessment. Go ahead – engage a qualified cost estimator today! ■

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