

MOCA Systems

Project Management Insights

Buyer Beware

Managing Project Cost Risks in a Depressed Construction Market

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Over the past four years, the volume of construction has steadily decreased as the economy continues to stumble. The result is increased competition by building contractors for the available construction work. At first blush one would think that this is a very good situation for owners who plan to build new facilities or renovate their current physical plant. However, the current “buyers market” can be a difficult minefield that needs to be traversed carefully. Owners can mitigate their risks by using a Construction Management team with qualified and experienced cost professionals.

HOW SHOULD AN OWNER MANAGE THEIR PROJECT RISKS?

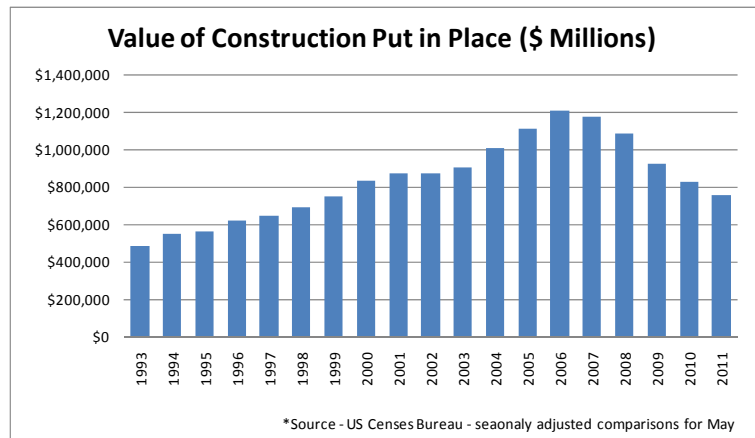
Owners need to be cautious in the current market. The elation that is experienced when bids come in well below budget on bid day can quickly change when problems begin to mount. The best way for an owner to mitigate the risks associated with an extremely competitive market is to put a well run cost management program in place. Essential elements of a successful cost management program include; an owners construction manager; experienced cost engineering professionals; a well planned project delivery process; and finally project control specialist to oversee the construction.

In today's declining construction market, cost risk management is essential to the successful delivery of any project.

BOOM AND BUST

Construction grew 220% from 1993 to 2006 fueled by a robust economy, demographic shifts and finally the housing bubble.

Construction-related businesses grew



and expanded to match the ever-increasing demand. Annual construction in the United States peaked in early 2006 at just over \$1.2 Trillion according to the US Census Bureau. The Bureau reported in May 2011 that the seasonally adjusted annual total construction put in place is \$753 Billion – a drop of over 37% from the peak in 2006. This rapid reduction in demand has taken its toll on jobs, vendors, subcontractors and general contractors. The July 6, 2011 edition of the Wall Street Journal reported that the construction industry has lost over 1.9 million jobs (26%) since January 2008.

INCREASED COSTS

During the past four years, construction cost (The sum total of labor, material and equipment that a contractor pays to complete a project) has steadily increased. The Engineering News Record (ENR) Construction Cost Index indicates that the average cost of construction has increased by more than 12% since January 2008. Additionally, Econoplay (www.econoplay.com) reported on June 10, 2011 “...*heavy competition for the few projects that are out there are keeping construction costs contained at lows – despite ubiquitous price increases for building materials that contractors are mostly eating*”.

INCREASED COMPETITION - DEPRESSED SELLING PRICES

As construction rapidly cooled off over the last four years, competition increased, thereby putting a squeeze on the selling price of construction. According to the Turner General Building Index the national average selling price of construction has dropped about 13% from its peak in 2008. The selling price in some local markets has decreased far more than the national average.

CONSTRUCTION BUSINESSES FIGHTING TO STAY ALIVE

The industry has been contracting as demand has decreased. However, many firms that were started during the boom years are desperately trying to hang on to their businesses. This has led many construction businesses to “buy-in” to a project with significant negative risks for all involved. Ken Simonson, chief economist for the Associated General Contractors of America, was quoted in the June 15 edition of the National Real Estate Investor Online about the current situation – “...*contractors are so hungry for work that they are continuing to promise to deliver jobs for almost no increase in price, in spite of their having to pay more for materials. That’s a pretty dangerous situation for contractors who have already cut their margins to a minimum, or maybe into negative territory*”.

Not all projects awarded to extremely low bidders have problems. There are many contractors that have become resourceful during these difficult times and developed ways to stay competitive while delivering quality projects. However, there are a significant number of current projects that are experiencing problems after the contract has been awarded to an extremely low bid. Although anecdotal,

we have received many reports over the past two years of ever increasing change orders, project delays and deteriorating quality. The risks that are incurred by an owner in this situation can be significant. Some of those risks include; quality (cutting corners); extensive change orders; cash flow problems for the prime and their subcontractors resulting in project delays; and worst of all default by the contractor.

ATTAINING A SUCCESSFUL COST MANAGEMENT PROGRAM

Owners should fully engage their in-house construction management staff early in the project life cycle. If an owner does not have in-house staff they should seek and engage an experienced Construction Manager (CM). A well qualified CM that functions as an owner's representative should be an independent owner's representative so that all conflicts of interest are eliminated – the CM is an independent agent that represents the owner's interest. When hiring a CM, make sure that the firm can demonstrate a good track record of delivering successful projects that have met previous client's expectations and budgets.

One of the first steps in the project life cycle is the development reasonable budgets based on requirements. As soon as project requirements are established accurate construction cost estimate and schedule should be developed. The most effective budget estimates and early schedules are developed using detailed parametric estimating and scheduling tools. This is essential to managing project risks. Once the budget estimate and schedule have been agreed upon they will be used as the baseline for the project. This can only be done by developing a detailed budget estimate and schedule.

Experienced cost professionals are essential to achieving quality, accurate estimates. During the design process – or project development – the cost engineers assist the CM team with making important decisions that can have major impacts on project costs and risks. The decisions include determination of the most economical delivery method for the project, such as design-build, CM at-Risk, or Design-bid-build. Other important cost decisions include economical building components and systems, evaluation of local market conditions that can affect price or even the affects of weather. Each decision will have its pros and cons depending on the complexity of the project. The project cost and schedule should be re-evaluated at each design milestone in order to determine if the project design is within the limits of the budget and to track the cost impact of design decisions as the design progresses.

A final project estimate and schedule must be developed prior to advertising the project for bid if it is a Design/Build or Design-Bid-Build project, or prior to negotiating a Guaranteed Maximum Price if the project will be delivered using CM at-Risk. This is essential to managing project cost risks to the owner. This

construction cost estimate and schedule must be a determination of a “fair and reasonable” price and schedule for the project. This “yardstick” of cost and schedule will be critical in the evaluation of the project price as presented by a general contractor. It will give the owner the ability to determine if a project bid is either extremely low or too high.

Bid prices that are too low carry all of the risks described earlier. A detailed owners estimate and schedule will allow the CM team to evaluate the validity of a contractors bid. When there is a significant difference between the owners estimate and the bid, this detail will enable the CM to discuss differences in the project price and determine if the contractor has a firm grasp of the project requirements, has developed an innovative approach to completing the project, or has just “bought-in” to the project with significant risks of failure.

Finally, after the project contract has been negotiated and awarded, the final step to a successful project is to monitor the contractor’s progress. An experienced CM will bring to bear project control technology such as Project Management Information Systems, Earned Value Management systems as well as change order analysis to assure that the all project milestones are met and that project problems are found quickly and mitigated early.

SUMMARY

The consequences of awarding a construction contract to a bidder that has presented an unreasonable price and schedule can be as costly. Owners can mitigate their risks by using a CM team with qualified and experienced cost professionals following a well structured project delivery plan. In today’s declining construction market, cost risk management is essential to the successful delivery of your project.