



THE BAY DIMENSION

the newsletter of tbd consultants - edition 15, 3rd qtr 2009



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Market Update

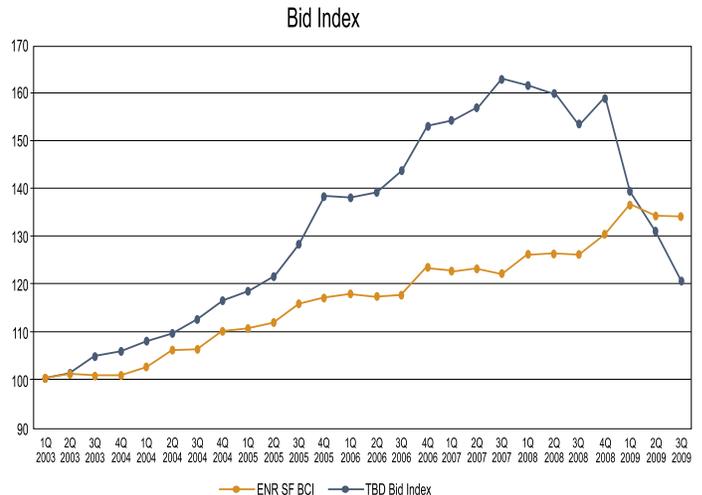
Gordon Beveridge

At the time of writing (mid June) the Stock Market is starting to drop again, but generally it has been showing a determination to rise, even if ever so slowly. The same cannot be said for the construction market.

The latest unemployment ratio in some trades has hit 20% or more. This is almost double the general unemployment rate of the entire workforce and illustrates how badly the construction sector has fared in this recession.

Based on bid results in the past couple of months, the market for General Contractors and especially subcontractors has moved to a market of desperation. There has been a stampede of contractors willing to compete in the already crowded public sector with the winner takes all mentality. The “winners” or low bidders in many cases are 20-40% below the market of only six months ago.

However, procurement methods will dictate to some extent just how low the bids from General Contractors will go. In the highly competitive Public Sector Lump Sum Bidding, where winner takes all, bids have been coming in 30-40% below the market rate of the fall 2008. Dissect a little into this market and we have found a large number of subtrade bidders (not unusual to have 6-10 bids for each trade) with a very large spread of bids (lowest to highest in the range up to 100%).



In this arena the low sub bids have little margin or possibly negative margins to secure work and hopefully keep or hold their core workers until the market recovers. A serious concern for owners will be the threat of default or lack of performance as the chickens come home to roost and the market continues to languish.

There are clear warning signs of trouble ahead and owners will be well advised to hold some of the money saved on bid day in reserve to cover for the fallout of any defaulting contractor.



In the more cautious world of the CM/GC there is certainly fierce competition on General Conditions and Fees, however there is a much more measured approach to the subcontractor bidding market. Many of the CM/GC's have done their own estimates and can detect bids below the reasonable market value. They typically are not obliged to take the low bid if they consider it to be below the reasonable market value. They will also be more selective as to who will be allowed on their bidding list. In this world of CM/GC we would still anticipate the bids to be 15-20% below the market of last year.

Going forward we do not see the market improving in the short term (3-6 months). Owners will continue to be

surprised on how low bids are versus budgets. These pleasant surprises will be tempered against the inevitable problems on site as contractors struggle to perform and survive when time and the market is not on their side.

Will the stimulus make an impact? The short answer is yes there will be some impact, especially with the infrastructure market; however, it is difficult to see a major impact on most companies. It may help to save current jobs, but difficult to see the package creating new construction jobs.

What will LEED Cost?

Oliver Fox, LEED AP

This is a question we are often asked by architects and owners here in San Francisco (on commercial projects) and unfortunately there is no straight answer. The answer involves the project certification level (certified, silver, gold or platinum), size of the job, function of the building and whether it's tenant improvement or new build. The most accurate analysis is to review each project individually. At conceptual design, however, we need to use past project experience.

James Jenkins (LEED AP), Principal at San Francisco based GCI General Contractors who have completed several LEED projects including gold and platinum, uses Table 1 as an early stage benchmark. Although costs can vary on a wide range of factors, "costs mainly depend on how far the owner wants to push the green envelope especially at gold and platinum level when enhanced MEP (energy & water efficiencies) systems are the main cost drivers."

Table 1. Includes construction costs and soft costs

	Total Cost %	% Soft Costs	% Construction Costs
Certified	1 - 2%	50%	50%
Silver	3 - 5%	40%	60%
Gold	6 - 10%	30%	70%
Platinum	11 - 15%	25%	75%

TBD has seen that certification and silver level do not affect the budget negatively especially in California with Title 24 energy efficiency standards. If the project team decides early enough, these green targets can be achieved with minimal addition to construction costs (hard costs). There will always be the soft costs premiums, which are a small percentage of the overall project cost.

Current soft costs for LEED projects:

- LEED Project Registration (flat fee)
- Project certification (based on SF of building) for construction and design review
- Premium fees from architects and MEP engineers depending on level of certification
- Third party commissioning (prerequisite) which involves an outside team that is not part of the design or construction team. This premium is approximately 0.5% - 1% of construction costs

The most significant soft cost is the architects and engineers' additional time and effort to participate in the LEED process. LEED imposes incremental requirements on architects and engineers because these designers must assess how a project could best attain certification and prepare the design and specifications to reflect these additional requirements. As architects complete more LEED projects the more comfortable and efficient they become. The costs associated with administrative time for documentation, preparation and submittal to the GBCI will always be present but design cost premiums for designing to LEED requirements is reducing quickly.

With regards to construction cost and incorporating sustainable design elements, systems are becoming more affordable and more common in the market place. With



this higher demand, economies of scale take effect and drive down the cost of reasonable sustainable design. General contractors experienced with the paper work can lead the process with help from their subcontractors. There are definitely additional costs associated with "holding the subcontractors hand" if their team hasn't worked through a LEED project before says Jon Helman, CFO at GCI General Contractors. "Once a contractor has worked on several green projects, that initial unknown LEED factor disappears, so much so that we don't see significant construction premiums associated with silver and certified in our TI projects".



With many sustainable materials like recycled carpet, low VOC paint, FSC wood and PVC & VOC free resilient flooring costing the same as standard products, most companies can renovate or construct new buildings with sustainability in mind comfortable that it's not going to effect the project balance sheet. When sustainable design items like green roofs systems, chilled beams, grey water systems and storm water storage start being added, this is where cost premiums occur. The arguments against such premiums is lifecycle analysis to measure the payback period, the environmental considerations and the branding and public relations LEED can give a company which is difficult to put a cost to but is evident with projects like the Academy of Sciences in Golden Gate Park.

Currently the USGBC is rolling out version 3 of the LEED certification process, which has more of an emphasis on energy and atmosphere, water efficiency and acknowledges different project locations and the advantages and disadvantages a location may have. By 2010 we should start seeing what additional cost premiums are associated with projects going through the higher levels of V3.

Special thanks to James Jenkins & Jon Helman at GCI General Contractors

GMP NEGOTIATION, Part 2

We are resuming our series on the GMP (Guaranteed Maximum Price) procurement method, and in this article we continue to outline industry standard methodologies for negotiating and establishing a fair GMP aimed at ensuring that the project will be completed within budget, schedule and meet all parties' objectives.

COST AND SCHEDULE INCENTIVES

To encourage a GC to meet budget and schedule, GMP's usually include incentives. The industry range for a cost incentive is 10% to 30% share of any cost under runs and is also dependant on the GC meeting or beating mutually agreed milestone dates. It is important to clearly define these milestone dates in finite detail. For example a definition of "Mechanically Complete" should include every single system that needs to be ready for turnover including TOP's, state of the interiors, state of temporary work, etc. Another important aspect to consider is what items are within the GMP [see insurances and site supervision] and what contingencies the GC is allowed to carry within the GMP. The more contingency there is within a GMP the less chance there is of overrunning, hence the more cost incentive the GC will receive. Contingency levels are discussed further below.

CONTINGENCIES

With any construction project the correct calculation, allocation and draw down of contingency is fundamental



to successful budgeting and execution. The following discusses a common allocation of contingency.

DESIGN CONTINGENCY

A Design Contingency should be carried to cover scope that lacks definition and scope that is anticipated to be added to the Design. As the Design becomes more complete the design contingency will reduce. The industry range for design contingency is 15% at Schematic Design, 10% at Design Development and 5% at Construction Documents.

Ultimately all design contingency will become scope before the start of construction. Many projects carry 0% design contingency at the "Issue for Construction" [IFC] or 100% Construction documents.

CONSTRUCTION CONTINGENCY

The Construction Contingency is carried to cover the unforeseen during construction execution and risks that do not currently have mitigation plans. As Risks are mitigated, Construction Contingency can be reduced, but should not be eliminated. Setting the right amount of construction contingency is important as it is usually included within the GMP and can affect any cost incentives. Ultimately an owner wants to keep construction contingency as low as possible and carry additional contingencies outside of the GMP to cover risk. A current trend is to calculate construction contingency by Monte Carlo Analysis, where a statistical model of the project is created and the owner and GC mutually agree what level of risk they are willing to accept for costs to overrun. From this the model can determine the statistically most likely closeout cost and hence the amount of construction contingency to include within the GMP. The industry range of construction contingency included within a GMP is 3% to 5%, however some GMP's are agreed very early on in design and as high as 10% has been seen. Construction contingency cannot be spent without the owner's agreement.

OWNER'S CONTINGENCY

It is prudent for an owner to carry an additional contingency to cover user / owner driven scope change, bidding conditions, claims and delays. The owner should also carry contingency to cover redesign costs, increased consultant fees due to delays and possibly unidentified equipment purchases. The industry range for owner's contingency is 5% to 10%.