Estimating – It's Both Art and Science

Several years ago when I attended bid openings, there was a contractor who would groan as the bids were read. Once the low bidder was announced, he would inevitably say, "If you're slow, you're low; if you're fast, you're last." Most seasoned estimators would agree. In short, bid preparation is both an art and a science which should be taken slowly, never rushed.

The Science

Get the Big Picture: Every contractor must have 100 percent clarity about the work they are pursuing. They must know important elements such as the locations they are willing to work, the types of owners, and the price range they are comfortable bidding. A simple checklist (with a yes/no column), numbering system, or database ensures each facet has been properly considered. See www.sullivanhi.com for a free sample checklist.

Standardize: Always compare apples to apples. Your bids should be prepared the same way every time. Standardization and cross training allows anyone to take over the estimate when necessary and enables easy and transparent reviews. Never allow mavericks in this arena.

Measure Success: To track both the bid hit ratio and historical job costs, I recommend maintaining a multi-user database. In order to reach your company's annual planned profit, estimators should track the number and total amounts of their submitted bids. Over time, this will help determine how many submitted bids you should have in order to reach your annual planned revenue. Additionally, include the name and amount of the winning bids when your organization is not selected. This will help you with any subsequent bids with the same owners and competitors.

Compare Costs: Contractors should have ready access to job cost histories to ensure mistakes are never made twice. Track information such as type of job, location, and obstacles to completing the project. You should be able to review costs by: man-hours per tasks, cost per cubic yard, cost per linear foot, etc. The greater the data in your historical cost library, the more accurate you will be in the future. Material prices should constantly be monitored and internal equipment rates updated regularly.

Gather Data: Today's computerized estimating programs give you a storehouse of estimates. They will naturally increase the speed and efficiency of your first draft, leaving additional time for the all-important feedback by the rest of the team.

Competition: An experienced estimator with always seek to bid work where he knows there will be fewer bidders but, never bids the competition, only the cost of the job. The tracking of competitor pricing can be an effective way of comparing similar types of projects in the future.

Account for Risk: Contractors are rewarded for the risk taken to build the job. At plan review time and final estimate review, the above-average risk items should have the appropriate costs allocated to cover the risk. Some of these could include: short schedule time, owner challenges, environmental issues, traffic control, or dewatering.

Manage your Margin: If a job is always marked up based on its final price, your final costs will usually differ from your initial estimate. At a minimum, the labor, equipment, materials, subcontractors, allowances, and force account items should be individually marked up commensurately based on their associated risk.

The Art

Have Awareness: A great estimator constantly monitors competitors' bid results and looks for ways to save on job costs. A prime contractor can often win work by seeking new subcontractors with more competitive pricing – or by simply lowering the mark up. Getting work with subcontractor pricing takes constant vigilance, but will usually provide a higher final job profit.

Communicate: Meeting face-to-face to discuss the job always provides far better pricing. Why? Regular communication with the owner, GC, and/or subcontractor will instill confidence and trust. Prebid trust lowers the need to add contingencies for the unknown.

Make a Masterpiece: Seek estimators who are naturally analytical and "nitpicky" about the minute details. These people tend to be conservative and will prepare "what if" scenarios. Don't let your estimators think of the job as gambling — this is your money on the line, not theirs.

Overall, I see the estimating department as a type of contractors' school. It is a Best Practice to train new engineers in the estimating department. They'll learn how to read plans, prepare a comprehensive take off, and build the job mentally. Seasoned estimators should be willing to teach these skills to create a deep bench of future project engineers and managers for your company.

Contractors who practice these steps will prepare more accurate cost estimates with fewer errors. Most importantly, they will be aligned with the company's mission and financial goals.

Garrett Sullivan is the President of Sullivan & Associates, Inc., a management consultancy focused on the construction industry. Connect with him at GSullivan@SullivanHi.com, www.SullivanHi.com, or 808.478.2564.