

Tips for Containing Costs on School Construction Projects

By Rich Henry

Given a choice, school districts, teachers, parents, students and communities would desire that construction projects go smoothly, producing high-quality facilities delivered both on schedule and on budget. To ensure that money is not spent unnecessarily, the overall process must be efficiently managed during all stages: planning/design, bid/award and construction. This article will outline a few simple tips to “contain costs” on school construction projects. This discussion will not attempt to address methods to reduce the direct costs of a project, but will assume a reasonable budget has been established for an intended project scope of work.

Planning/Design Phase

Identify the scope of the project and its key stakeholders. One of the most common causes of rising project costs stems from a failure to adequately define project scope. To accurately define scope, it is first necessary to identify the key stakeholders who will be involved in the decision-making process and specifically define their roles. Many school districts choose to involve school boards, teachers, local business representatives and citizen advisory committees in the building process. Clearly identifying each

individual participant or group, their roles and deadlines will minimize confusion and inefficiencies that may push costs upward later.

Determining and prioritizing educational goals.

When determining project scope, the mission and educational goals of the district must be defined. Once determined, these goals must be prioritized to provide flexibility to economic changes, program adjustments and unforeseen circumstances that might challenge the budget during the design stages. Keeping the process moving is critical to avoiding a waste in

both money and time.

Develop project master schedule.

Key decisions made regarding a project schedule and target occupancy date will directly impact the ability to contain costs. Weather, the school calendar and general economic conditions are just a few examples of factors that can throw a schedule into disarray. Establishing deadlines for completion of the design, including the appropriate periods for plan check and agency approvals, can be critical to ensure they coincide with the best times of the year to bid and build a project to meet deadlines. As an example, if a project is required to start or work through the winter or rainy season, and the appropriate inclement weather days are not built into the

schedule, the builder will be forced to work more overtime hours or provide a larger than normal workforce to meet the schedule. This will drive up total project labor costs. Developing a solid master schedule that allows an appropriate time frame for all phases of a project can significantly help avoid such unnecessary cost expenditures.

Choose your building team early to control costs. Bringing an experienced contractor on board right from the beginning of a project – before the final drawings are completed – can save substantial amounts of money. Builders can supply informed opinions on the validity of preliminary cost estimates and offer documented information about alternative materials and systems that should be considered. Small changes and enhancements to the early design concepts require fewer work-hours and less effort than do last-minute bricks-and-mortar changes. These also reduce uncertainty about “owner intent” during the bidding phase and consequently reduce the risk of unnecessary change orders later for items that were intended but not clearly defined.

Do your homework. Not all project activities are directly controllable by your team’s stakeholders. Approval processes (for funding, certificates of need, building permits, etc.) can be lengthy and filled with red tape. If you do not get a running start to clear certain hurdles in the early stages, it might be very difficult to speed up the project, simply because of the interrelatedness of certain activities required during the process. Construction, after all, is a momentum-sensitive business.

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Bid & Award Phase

Prequalification of bidders

When choosing a contractor, examine its bonding ability, financial capacity, project experience, past performance and the quality of the project team. Be sure to ask about the company's experience in building the type of facility that you want, and check out the company's performance track record. Also, select a bid date that will minimize conflicts with other projects bidding at the same time to ensure the best response from the contractor community.

Don't buy too cheap. If you choose a contractor who takes a job for significantly less than the rest of the bidding field, he will likely try to cut corners, and your job could significantly suffer in the end. Look carefully at the group of bid numbers; if one bid stands out as far too low, the bidder either discounted its numbers on subcontractors or made a major error that will force the company to try and recover its losses later via expensive change orders. In short, low first cost does not guarantee low final cost.

Construction Phase

You must have a coordinator.

Building is an interrelated process: you can't put up the fixtures until the drywall is up; you can't install the drywall until the electrical and plumbing rough-ins are in place and so on and so on.... Because coordination of a specific sequence of events is critical in any construction project, one member of the team needs to take responsibility for managing and overseeing who does what on a daily basis and be ultimately responsible for the management and coordination of all specific sequences and events during the construction stage. Otherwise, chaos will occur, which will result in significant inefficiencies – and unnecessary costs.

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Establish clear lines of authority.

A single source of authority must be identified for each of the three key players on the building team: the owner, the architect and the builder. Each of these individuals should be knowledgeable about the project and have the authority to make final decisions. Every effort should be made to retain the same representatives throughout the duration of the project to facilitate the decision-making process.


Utilize partnering Encourage open communication between all team members. Partnering, an informal or formal commitment by an owner, architect, contractor, subcontractor and consultant to work cooperatively on a project, can build trust among team members. Ultimately, this trust can result in decisions being made more quickly, keeping a lid on costs.

Keep control of change orders

Changes are often disruptive and costly. They should be considered individually in terms of their necessity, cost and impact on the construction schedule. However, if changes must be made, don't delay! Allow maximum time to negotiate and execute all modifications.

Make timely payments When payment from an owner is in doubt, a contractor's enthusiasm for a project diminishes. A schedule of monthly payments will keep the construction team motivated. In the end, you want your contractor to be concerned with getting your school finished, and not worried about getting paid. The quickest paying owners and contractors can usually expect to receive positive results in both quality and schedule. Interest for late payments is a waste of money and is rarely contemplated in the budgeting process.

Conclusion

With careful planning in the beginning and close monitoring throughout the project, it is possible to contain costs on your next school construction project. An experienced architect and contractor will be able to assist you to provide measures that can ultimately contain costs and get you as much project for your money as possible. 

Richard A. Henry, vice president, education services for McCarthy Building Companies, Inc., has more than 20 years of experience in the construction industry. Currently, Henry is responsible for leading the firm's Education Services Group to provide construction services for elementary and secondary education facilities nationwide. Over the past 15 years, McCarthy has constructed more than 300 school projects nationwide, totaling more than \$1.5 billion in contract value.