

Back to the Future

Traditionally, developing a building program has been a fragmented effort, with architects leading the way, engineers in charge of some activities, contractors in charge of others, and the balance left up to 'fate'. With today's technological advances, designing and building medical facilities has become very complex. This process is fraught with pressures and uncertainty, and in many instances characterized by cost and schedule overruns, which also makes it expensive.

Such shortcomings are becoming more and more unacceptable in all industries, but they seem to be more intolerable in healthcare. Economic pressures are forcing healthcare providers to reexamine every aspect of operations, staffing ratios and energy consumption. The push is definitely on to find the most patient-friendly, efficient and cost-effective way to do business and provide healthcare on a day-to-day basis.

Historically, the bulk of medical construction has been through the conventional design-bid-build approach where an owner hires a fee-for-service architect to design a building, the architect develops the building program, and the project is ultimately put out to bid. Then a contractor is hired to build the project. However, there are no cost "guarantees" with the design-bid-build approach; and as a result of the above mentioned pitfalls, many owners have recently turned to the design/build concept of building program development. This format integrates the design, engineering and construction segments of a project into a team approach with up-front cost "guarantees".

The design/build concept of consolidating these design and construction segments in one format is nothing new, as at one time it was the traditional method. When a king or pharaoh wanted to build a new palace, stadium or temple, he would simply go to an individual called the 'master builder', who was the architect, engineer and contractor all rolled up into one. Therefore, today's trend of developing projects with a design/build approach is in some respects going 'back to the future'.

A design/build format is a team approach, with all team members being in the same boat and rowing in the same direction. With the sophistication of today's medical facilities, a team should minimally be composed of the following technical disciplines: architectural; mechanical; electrical; plumbing; civil; structural; and construction. Good communication between these team disciplines is paramount. The left hand must know what the right hand is doing at all times. All technical disciplines must be involved and have input into the development of design/build projects from the outset. This integration has proven to reduce construction costs and save owners both time and money.

A true single-source design/build firm will offer an owner a "guaranteed" cost to develop the owner's project. The design/builder will be the owner's single point of contact throughout all stages of the project's development process. The owner will have one firm to communicate with, depend upon and hold accountable for complete project development. There will be no finger-pointing during the construction process. If the design/build firm makes an error or an omission, the company will correct it with absolutely no additional cost to the owner.

If history is really repeating itself and we are going 'back-to-the-future', no one should be surprised by the recent resurgence of the design/build approach. After all, many great architectural and engineering feats, like the Pyramids, Great Wall of China and Taj Mahal were developed by the 'master-builder' who utilized the design/build delivery system.