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Preconstruction services provide opportunities and protection to an owner

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Today's economic conditions challenge every construction project. In response, owners must demand the most judicious use of every construction dollar. This has led to a growing trend in the construction industry to forego in-depth preconstruction services to save the cost of these services. Unfortunately, loosening or eliminating oversight of the design process by a construction professional often results in a higher construction cost and an unpleasant surprise when "hard bids" exceed the owner's budget. Let's consider the opportunities and protection that preconstruction services provide to an owner.

Why Preconstruction?

The construction manager collaborates with the owner and design team to assess and evaluate the ever-evolving project design during preconstruction. This analysis encompasses not only the cost of the proposed design, but, just as importantly, its constructability, the impact on schedule, and the affect on the building's long-term durability and operating costs. The cost assessment/evaluation is done throughout each of the design phases - schematic, design development and construction documents - along with a comprehensive effort to provide full value for every dollar spent within an owner's budgetary constraints (i.e. value management).

This effort by the team will provide opportunities for both long and short-term savings, while preserving the owner's program and the design team's vision.

Starting off on the right foot

Each member of the preconstruction team works closely to ensure that all regulatory issues, design considerations, and construction costs have been anticipated during preconstruction. The construction manager will provide detailed cost and constructability feedback on all construction disciplines (civil, architectural, structural costs, and mechanical/plumbing/electrical) to form the basis of the project team's analyses and collaboration. While cost estimates can be provided at designated design phase milestones by the design team on a hard bid project, the collaborative design and cost review process offered under a preconstruction services approach will give owners the greatest protection against cost creep for the project.

A responsible construction manager considers the following tools to provide timely, understandable, and accurate feedback on the cost of the total building program:

• In-house historical data for similar project type

- In-house quantity take-offs and pricing

- Trade contractor input

- Assessment of appropriate contingencies / escalation percentages.

This approach provides a cost assessment from three different sources. The construction manager will meld this information into a comprehensive and reasonable current cost estimate for

the project.

The project team will then project the current cost to fit the project's future construction calendar and use their experience to anticipate the potential cost impact of the developing design and market pressures/escalations. Under the construction manager's leadership, this interactive and collaborative process repeats itself throughout the different phases of design and is the best way to insure that cost estimates represent what the cost will ultimately be to construct the project.

Correctly pegging the construction cost early in the design process provides the project team with an accurate roadmap to meet the owner's budget, insures that cost saving measures are limited to a level that is truly needed, and avoids the painful dilemma of a project substantially over budget when the bids finally arrive.

Value Management

Value management is another critical facet of preconstruction services that gives the project team the ability to control costs while maintaining quality, schedule, and design intent.

As an example, at the very early stages of design, the construction manager will work with the owner and design team to identify the most cost-effective structural system for the project, based not only materials costs, but also sustainability benefits, ease of installation and coordination with other trades, project schedule, and long term value. This same process will be applied to the selection of exterior wall, roofing, plumbing, HVAC, electrical and other major building systems and components. The value management process will also address the project scheduling and phasing, where cost savings can be reaped by scheduling a project to avoid costly winter conditions or by refining the phasing sequences to reduce the overall construction duration thereby providing lower general conditions costs and owner financing costs.

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