Keys to Successful Construction **Project Planning**

By Ed Gillespie

You wouldn't consider traveling long distances without knowing where you're headed, how you're going to get there and, most important of all, why you're going in the first place. Planning for a successful construction project is no different, with the exception that your trip expenses will probably run in the millions and unnecessary U-turns will be far more costly. The route to delivering a smooth construction project does not have to be an overwhelming, challenging experience. Adhering to the following "pre-trip" planning guidelines will lead to a predictable journey while significantly enhancing the comfort of the ride for you and your passengers (stakeholders).

Do Your Homework First

The need to construct a new facility, or renovate/expand an existing one, will present itself long before you have to call a meeting to discuss it. Once a need is validated, key internal questions should be answered prior to engaging the services of qualified design and construction firms, such as:

- How will the new space be used?
- How will it benefit staff and end users?
- How soon do we need it?
- What will it cost us if we don't make these improvements?
- What is a realistic project delivery schedule?
- What are our location options?
- What are our funding options?
- What approvals are needed to move forward?

Choose A Delivery Method

Once your initial homework is done, your focus should be on adding design and construction members to your team; professionals who will assist you in further defining your vision as well as your project's costs, schedule, and other critical details. However, before you pursue engaging their services, you have to decide on a delivery method best suited for your project.

The most common delivery methods are Design-Build, Construction Management and General Contracting. Based on cost, size, and complexity, Design-Build and Construction Management are often the preferred methods for larger projects. The benefits of these two approaches

ARTICLE HIGHLIGHTS

This article highlights key points shared by Fishbeck, Thompson, Carr & Huber and Granger Construction as part of their one-hour session on Sept. 17, 2015 at Michigan Municipal League's Convention in Traverse City. The title of the presentation was: What You Want to Know About the Design & Construction Process, But are too Afraid to Ask.

become exponential when design and construction professionals begin working together early in the preconstruction phase. This early collaboration will result in a design and construction plan (roadmap) that aligns with your vision, budget, and schedule expectations, and in significantly reducing costly change orders (U-turns).

General Contracting, also known as Design-Bid-Build or Hard Bid, is where you hire an architectural firm to create your design and plans and, when completed, they're released to contractors for bids. Under this approach, most relationships are structured as lump-sum contracts. This delivery method has its benefits, but usually leads to greater owner risk.

Graphic A provides additional details about the benefits of each delivery method:

Chart A

Benefit	Design-Build	СМ	GC
Single Contract for Design and Construction	✓		
Facilities Early Team Collaboration	✓		
Cost Input During Design Process	✓	✓	
Competitive Subcontractor Bidding	✓	✓	✓
Early Guarantee of Design and Construction Costs	✓	(√)	
Provides for Total Project Accountability	✓		
Allows for a Fast-Track Schedule	✓	(√)	
Minimize Change Orders	✓		
Value Engineering Cost Savings	✓	✓	
Key Trades Hired Early in the Process	✓		
Guaranteed Maximum Price Contract	✓	(√)	✓
Fee Based Contract		✓	
Lump Sum Contract			✓

Benefit partially available



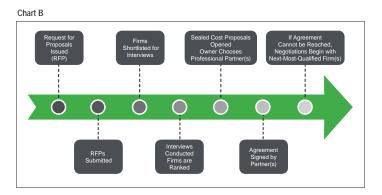
Benefit potentially available under certain circumstances

Select The Best Professional Team

Today, owners are beginning to embrace the concept of vetting the qualifications of design and construction team members, through the RFP and Interview processes, before looking at fees and other cost data. All this entails is requiring that cost proposals are submitted in separate, sealed envelopes along with the RFPs. Once proposals have been evaluated and interviews conducted, each review team member ranks potential design and construction proposers before opening up their cost information. This approach places selection emphasis on qualifications, trust, and compatibility. Also, it's a logical approach because if your potential design and construction partners do not impress you in these three critical categories, you probably don't want them on your team, at any price.

Should you decide that your top proposer's price is too high, opting to engage your second or third choice is definitely a better way to select qualified partners than on fees alone. Keep in mind that the value (dollars) generated by engaging the "right" partners usually far outweighs the value of proposed fees.

Graphic B illustrates the flow of this approach:



Entire Team Clarifies Your Needs/Goals

Once your entire professional team is on board (design and construction), everyone begins working together to further define project specifics, such as needs, wants, site requirements, cost/schedule challenges, mechanical and electrical systems, sustainability goals, regulatory processes, and other issues that have to be addressed to thoroughly plan your trip. The more thought and effort you put into upfront planning, the smoother your project will be delivered, the more time and money you will save, and the greater the overall quality and functionality of your project.



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Start Your Project Right

Once team members have begun to work together, early in pre-construction planning a mandatory meeting is essential to ensure that everyone understands and embraces your vision, goals, and operational expectations (and you understand theirs). Topics covered should include who from each team is responsible for making timely key decisions, affirming your budget and schedule, preferred avenues and frequency of project reports and general communications, the need and meeting timetables for specialized planning groups, ways to maximize local contractor and vendor

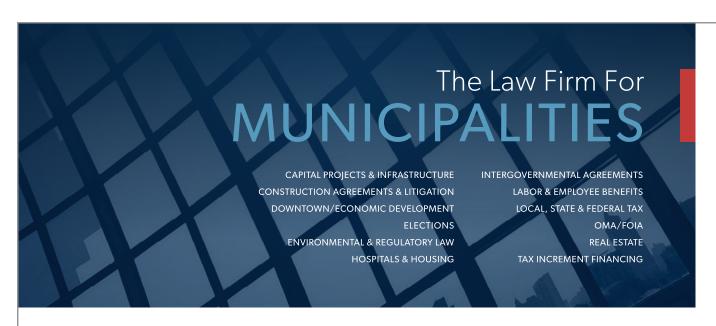
participation, etc. This meeting should not adjourn until the concerns of every team member have been addressed.

The concept is simple. Everyone agrees, up-front, to what they're going to do, when and how they're going to do it, and measurable ways to be held accountable for their performance. And because detailed meeting minutes will be shared with all participants, there should be no misunderstandings about what was agreed upon, enabling your journey to start and move forward on a unified, predictable course.

Wrap Up

The success of your project is directly proportionate to how thoroughly your vision is planned, shared, clearly understood and embraced (starting in the pre-construction phase), the quality of the professional team you engage, their vigilant focus on remarkable performance (all of the time), employing the highest level of communications required to keep your "trip" on course, and avoiding costly U-turns along the way.

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