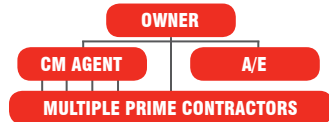


PROJECT DELIVERY METHOD COMPARISON | *Getting the best value for your construction dollar*

CONSTRUCTION MANAGEMENT AGENCY



CHARACTERISTICS:

- Owner contracts directly with Architect firm
- Owner contracts directly with each subcontractor
- Similar to CM at risk, but no guaranteed price
- CM and Architect can be selected based upon qualifications, expertise, & overall value

ADVANTAGES:

- CM and Architect selection based upon qualifications
- Projects can be delivered at accelerated or "fast-tracked" schedule
- CM involved in budget development
- Owner can select subcontractor
- CM responsible to deliver the project on budget and schedule

DISADVANTAGES:

- CM has no contractual responsibility or control with subcontractors
- Final price not established until bids are received
- Owner must manage multiple contracts
- High level of Owner involvement
- Higher Owner risk since the Owner holds contracts

CONSTRUCTION MANAGEMENT AT RISK



CHARACTERISTICS:

- Owner selects the Architect based upon qualifications and fee
- Owner selects CM based upon qualification and fee prior to design being completed or possibly started
- Architect and CM work together to deliver the project the owner requires
- A GMP is established early in documentation
- Competitive bid for subcontracts

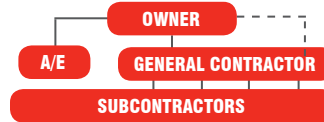
ADVANTAGES:

- CM and Architect selection based upon qualifications
- Owner can be involved in selection of CM team members
- Early CM involvement to control budget and schedule
- Owner may be involved in subcontractor selection
- All work except CM and A/E is competitively bid
- GMP is established early
- Projects can be delivered at an accelerated or "fast-tracked" schedule
- Opportunity for cost sharing
- Ensures high quality at lowest cost

DISADVANTAGES:

- Design team may not take input from CM during design
- Perception that price competition is limited

DESIGN BID BUILD



CHARACTERISTICS:

- Architect hired first by the owner
- Owner/Architect develop program and complete documents
- Architect is fully responsible for estimates, constructability and design
- After the project documents are completely designed, they are put out for bid
- Traditionally the low bidder is selected to complete project
- Communication is directed through the Architect to the Owner

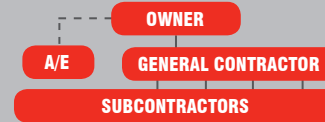
ADVANTAGES:

- Familiar delivery method
- Defined roles/responsibilities for team
- Allows more firms to bid
- Initially presents the lowest potential cost for the project

DISADVANTAGES:

- No "fast-tracking" process available
- Low bidder may not understand project goals, objectives and criteria
- Owner has no control or input on subcontractors
- Process puts Owner as issue resolution agent if architectural documents and construction conflict
- High potential for change orders
- No cost savings sharing

DESIGN BUILD



CHARACTERISTICS:

- Owner hires a GC or Design Build team
- The Design Build team is fully responsible to the Owner for the delivery of a project
- Typically at some point (as early as possible) in the process a GMP is established
- Communication for the project flows through the GC or D/B team to the owner

ADVANTAGES:

- Owner has a single contract for design and construction
- GMP is established early and owner risk is controlled
- Except for Owner changes, no change orders
- Project schedule can be accelerated or "fast-tracked" if necessary
- Owner involvement in the process is limited
- Construction budget control
- Owner is not issue resolution agent
- Opportunity for cost sharing
- More opportunity to use Building Information Modeling techniques

DISADVANTAGES:

- Owner has limited involvement
- Difficult to establish criteria for selection of D/B team
- Design is complete at GMP
- Quality control is responsibility of D/B team, no checks and balances

OPTION: Select architect and general contractor separately, then form D/B team

INTEGRATED PROJECT DELIVERY (IPD)



CHARACTERISTICS:

- Owner selects CM and A/E based upon qualifications prior to design being started
- Owner/Architect/Construction Manager sign a joint contract
- Entire team establish the project goals and objectives
- Characteristics similar to those of CM at Risk

ADVANTAGES:

- CM and Architect selection based upon qualifications
- High efficiency delivery method
- "Fast-track" process
- Ultimate "team" project approach
- Early involvement of not only CM & A/E but subcontractors for major trades
- Owner risk is limited by team approach to risk/reward incentives
- Success of team members is measured against success of project
- Opportunity for cost sharing
- Increased ability to deliver project within budget and schedule
- Ability to maximize use of Building Information Modeling techniques

DISADVANTAGES:

- Requires very involved Owner
- Some contractual issues to be addressed