

## Construction Management @ Risk Comparison Matrix

Competitive Bid (Design-Bid-Build)	Construction Management At Risk
<p>Often referred to as Design-Bid-Build, this method is the one with which most Owners are familiar. It is a linear process where one task follows completion of another with no overlap possible. Plans and specifications are completed by the architect, then bids are requested. Contractors bid the project exactly as it is designed with the lowest responsible, responsive bidder awarded the work. The design consultant team is selected separately and reports directly to the owner.</p> <p>This method includes the following three types of Competitive Bids identified in G.S. 143-128(a1)(1) through G.S. 143-128(a1)(3):</p> <ol style="list-style-type: none"> <li>(1) Separate-prime bidding</li> <li>(2) Single-prime bidding</li> <li>(3) Dual bidding pursuant to subsection (d1) of G.S. 143-128</li> </ol>	<p>The Construction Management at Risk (CM@Risk) approach allows the Owner to interview and select a construction firm based upon qualifications early in the design phase. During the design phase, the construction manager works with the design team to provide construction methodology recommendations, constructability reviews, cost estimating and scheduling. A Guaranteed Maximum Price (GMP) is provided by the CM@Risk to the Owner near the end of the design phase. The CM@Risk receives bids from and awards contracts to prequalified subcontractors. The final construction price is the sum of the CM@Risk's fee, overhead, and contingencies plus the subcontractors' bids. The design consultant team is selected separately and reports directly to the owner.</p>
Advantages	Advantages
<ol style="list-style-type: none"> <li>a) Familiar delivery method</li> <li>b) Fully defined project scope for both design and construction</li> <li>c) Both design team and contractor accountable to Owner</li> <li>d) Lowest price proposed and accepted; pricing, including contractor fee and overhead, developed competitively: "lowest price"</li> <li>e) Creates bidding opportunities for multiple general contractors and subcontractors</li> <li>f) Typically used for simple projects, with defined schedules and budgets</li> </ol>	<ol style="list-style-type: none"> <li>a) Selection of contractor based on qualifications, experience and team</li> <li>b) Contractor provides design phase assistance in constructability, budgeting, and scheduling</li> <li>c) Continuous budget control possible</li> <li>d) Pre-qualification of subcontractors allows Owner and contractor to ensure quality and experience</li> <li>e) Subcontracts are competitively bid by pre-qualified contractors</li> <li>f) Better coordination between design team and contractor</li> <li>g) Changes in scope during design can be immediately priced by CM@Risk to determine budget impact</li> <li>h) Should reduce change orders during construction since CM@Risk participated in the design phase</li> <li>i) Ability to quickly add or reduce CM@Risk management staff as project needs change</li> <li>j) Typically used for large projects that are complex, requiring a high level of construction management due to multiple phases, technical complexity or multi-disciplinary coordination</li> </ol>
Disadvantages	Disadvantages
<ol style="list-style-type: none"> <li>a) Price not established until bids are received; may require redesign and rebid if bids exceed budget</li> <li>b) Quality of contractors and subcontractors not assured</li> <li>c) Cost estimates during design process do not involve contractor input</li> <li>d) Fosters adversarial relationships between all parties which may increase probability of disputes</li> <li>e) No design phase input from contractor on project planning, budget or estimates (constructability reviews)</li> <li>f) Not optimal for projects that are sequential, schedule or change sensitive</li> <li>g) Change orders and claims may increase final project cost</li> </ol>	<ol style="list-style-type: none"> <li>a) May cost more than traditional bid due to reduced competition in pricing of contractor overhead &amp; profit</li> </ol>