

CONSTRUCTION MANAGEMENT AT RISK
Within
THE UNIVERSITY OF NORTH CAROLINA

Why/How the University of North Carolina sought to utilize Construction Management at Risk as an accepted construction delivery method

-With the approval of the Higher Education Improvement Bond Program in the fall of 2000, the University faced an unprecedented challenge to complete a 4.5 billion dollar construction program on time and within budget seeking to place the entire program under contract within six years.

-The only standard construction contracting method available for the public sector in North Carolina since the 1930's was the multi-prime contracting delivery system that requires separate prime bids for the General, Mechanical, Plumbing and Electrical work.

-Many of the larger and more sophisticated general construction contractors needed to execute this program chose not to compete for University construction work because of the multi-prime contracting system. (A number of contractors do not hard bid any project, whether multi-prime or single prime.)

-The University petitioned the State Building Commission in the winter of 2001 for authorization to utilize the CM at Risk delivery method on a limited number of projects in the Bond Program. Permission was granted & ultimately thirteen projects were delivered under this authorization.

-Increased pressure from a number of public entities within the state to increase flexibility of construction delivery methods resulted in legislation enacted by the 2001 session of the General Assembly authorizing the use of single prime and CM at Risk as standard delivery methods effective January 1, 2002. The legislation also specified Qualifications Based Selection for Construction Managers at risk with fee to be negotiated after selection.

New Contracting Procedures and Documents required

-In the spring and summer of 2001, the State Construction Office, the University, and the Office of the State Attorney General developed a set of procedures and new CM at Risk documents.

-These documents have continually undergone refinement as the CM at Risk delivery method has matured, and are currently being revised for use by all State Agencies and as a guide to other public entities in the State.

Track record to Date (June 23, 2009)

-Campuses within the University System have completed or are in process with ninety-four (94) Construction Manager at Risk projects with a total value of almost \$3.3 billion dollars. Twenty-six (26) different companies have been awarded CM at Risk contracts. Fifty-one (51) projects have been completed - \$1,342,000,000. Fourteen (14) projects are under construction - \$928,000,000. Nineteen (19) projects are in preconstruction - \$663,000,000. Ten (10) projects are in the Construction Manager selection process - \$338,000,000

-Seventeen (17) additional projects were started as CM at Risk projects, but, for various reasons, were changed to single prime bid projects - mostly because of a failure to reach an acceptable Guaranteed Maximum Price and mostly in the earlier years.

-During this same period of time The University has used Construction Manager as Agent on two (2) projects with a value of \$70 million, Multi-prime contracting on eight (8) projects with a value of \$70 million, and Single Prime contracting on two hundred one (201) projects with a value of \$1.6 billion.

-The State has experienced only two claims on University CM at Risk projects – both from designers – settled for a total of about \$500,000. (Claims on single prime projects have also been minimal during this period.)

-CM at Risk projects have ranged in size from \$2.9 million to over \$200 million. Most projects have been in excess of \$15 million with a median range of \$20 million to \$30 million.

-The University started using CM at Risk with the intention of establishing a pre-bid Guaranteed Maximum Price which worked well in the early 2000's when the construction market was depressed. (No bid bust was experienced with the first 75 Bond projects.) As the market heated up, there appeared to be an advantage to the owner by sharing the financial risk with establishing a preliminary GMP prior to the receipt of trade bids with any required adjustment in the GMP made after trade bids were received and subcontractors identified. Owners now may exercise the flexibility to establish the GMP either pre-bid or post-bid depending upon the circumstances.

Challenges encountered in the CM at Risk delivery Method

-Teaching trade & specialty contractors to prepare bids and bid publically rather than simply quoting prices. (This has become less of a challenge as this delivery method has matured.)

-Getting some owners and some architects to assume their role as team members in a design process that requires active participation from all team members.

-Reaching clarity on “General Conditions” as an element of project cost. This remains a work in progress.

Some concerns we hear about CM at Risk

-“Cost More” – We have seen no evidence that this is true. The only published study comparing construction delivery methods about which we are aware (“Selecting Project Delivery Systems” published by The Project Delivery Institute in 1999) indicates minimum cost saving and significant time saving for Construction Management at Risk when compared to the traditional Design-Bid-Build method.

-“No Risk with a Post Bid GMP” – There are many risks in the construction business only one of which is financial. While it is true that the financial risk is eased with a Preliminary GMP, the Construction Manager must manage the project within the parameters of the negotiated general conditions and fee remembering that award of future work will be made on a qualifications based

selection process. So the real risk remains to perform well and on time from start to finish of the project.

-“Padded estimates” – We have seen little evidence of padded estimates although the recent economic downturn (spring & summer, 2009) has resulted in a number of pleasant bid surprises. In the North Carolina CM at Risk process, all unused funds (from cost of the work, general conditions & CM contingency) return to the owner offering little incentive for the CM to pad estimates.

Added value with CM at Risk

-Having the contractor at the table during the design process to validate cost estimates, suggest modification to design details that simplify & speed construction, and to establish common expectations with regard to project schedule.

-Establishing a team approach to the project planning & execution ameliorates the adversarial relationship often found between owner, designer & contractor.

-Selecting the Construction Manager at Risk with a qualifications based selection process.

-Assuring the best possible quality in the finished product.

-Achieving significantly higher minority participation over other methods construction project delivery.