

CONSTRUCTION MANAGEMENT AT RISK
A NEW CONSTRUCTION DELIVERY METHOD
For
PUBLIC SCHOOLS

Senate Bill 914, ratified by the General Assembly December 6, 2001, made more changes to the public bidding and construction laws than at any time in recent history. Among the items affected were the construction methods authorized in the delivery of projects for public entities, including public school systems. The five (5) methods authorized are as follows:

1. Separate / Multi-Prime Contracting: Separate drawings / specifications and prime contracts for each work division (G, P, H, E, etc.). (The traditional method everyone grew up with)
2. Single-Prime Contracting: Separate drawings / specifications for each work division (G, P, H, E, etc.) but only one prime contract.
3. Dual Bidding: Bids received under both single and separate prime methods; award at the discretion of the Board of Education.
4. Construction Management-at-Risk: The “new kid on the block” (Discussed in detail below)
5. Alternative Contracting Methods: Upon approval of the State Building Commission, Design Build and other methods will be considered on a project-by-project basis. Must be competitively bid. A local act by The N.C. Legislature can authorize alternative methods, as well.

CONSTRUCTION MANAGEMENT AT RISK (CM@R)

DEFINITION:

N.C. General Statute 143-128.1 defines “construction management at risk services” as services provided by a person, corporation, or entity that

1. Provides construction management services for a project throughout the preconstruction and construction phases. These services may include preparation and coordination of bid packages, scheduling, cost control, value engineering, evaluation, other preconstruction services and construction administration.
2. Is a licensed general contractor.
3. Guarantees the cost of the project. (Guaranteed maximum price, or G.M.P.)

General Statute 143-128.1 further states:

- CM@R: selected in accordance with General Statute 143-64.31
- Design services shall be performed by licensed Architect or Engineer
- Public Owner shall contract directly with Architect or Engineer
- CM@R shall contract directly with Public Owner for all construction
 - CM@R may self-perform a portion of the work only if :
 1. Bidding produces no responsible, responsive bidder for that portion of the work, or
 2. Subcontractor defaults and a pre-qualified replacement cannot be obtained in a timely manner, and
 3. Public Owner approves of the CM@R’s performance of the work
- All bids shall be opened publicly and, once opened, become public record
- CM@R shall act as the fiduciary of the Public Owner in handling and opening bids
- CM@R shall award the contract to the lowest responsible, responsive bidder taking into consideration:
 - Quality
 - Performance
 - Time specified for performance of the contract
 - Cost of construction oversight
 - Time for completion
- Public Owner may change a first-tier subcontractor for any portion of the work provided the CM@R is compensated for any cost increase
- G.S. 143-128(f), Minority Business Enterprises (MBE) program requirements shall be met.
- G.S. 143-128(g), Dispute Resolution, shall be complied with
- CM@R: Performance and Payment bond to the Owner is required

SELECTION OF CM@R

- Qualifications-based selection process per General Statute 143-64.31 similar to that process used for designer (Architect or Engineer) selection:
- Selection not based on fee but on qualifications
- Suggested Selection Criteria:
 1. Workload that is able to accommodate the addition of this project.
 2. Record of successfully completed projects of similar scope without legal or technical problems.
 3. Previous experience with the Public Owner, a good working relationship with owner representatives, projects completed in a timely manner and an acceptable quality of work.
 4. Key personnel that have appropriate contract experience and qualifications.
 5. Relevant and easily understood graphic or tabular presentations.
 6. Completion of Construction Manager-at-Risk projects, in which there were few differences between the guaranteed maximum price and final cost.
 7. Projects that were completed on or ahead of schedule.
 8. Recent experience with project costs and schedules.
 9. Construction administration capabilities.
 10. Proximity to and familiarly with the area where the project is located.
 11. Quality of compliance plan for minority business participation as required by G.S. 143-128.2.
- Fee to be negotiated after selection
- The designer (licensed Architect or Engineer) will be selected separately
- CM@R contracts directly with the Owner
- Designer (Architect or Engineer) contracts directly with the Owner
- No contract exists between the CM@R and the Designer

“PRIMER ON PROJECT DELIVERY” by AIA and AGC (joint publication) says the following:

- CM@R: Oversees project management and building technology issues:
 - Advice on time and cost consequences of design and construction decisions
 - Scheduling
 - Cost control
 - Advertising for and opening of bids
 - Coordination of construction activities
 - Contract negotiations and awards
 - Timely purchasing of critical materials and long-lead-time items
- CM@R provides a guaranteed maximum price, but the timing is flexible and depends on:
 - Evaluation of the amount of design information available
 - Amount of contingency included
 - Owner’s willingness to share in the risk of cost overruns
- Defining characteristics of CM@R:
 - Three prime players: Owner, Designer, CM@R
 - Two separate contracts: Owner to Designer, Owner to CM@R
 - Final provider selection based on aspects other than total cost
- Typical characteristics of CM@R approach include the following:
 - Overlapping phases: design and build (fast track)
 - Hiring of construction manager during the design phase
 - Preconstruction services offered by the CM@R:
 - Constructability review
 - Bid management
 - Specific contractual arrangement determines the role of the players
- Advantages:
 - Construction firm selected by interview based on quality rather than low bid
 - Early CM@R involvement in estimates and constructability
 - Owner selects architect and CM@R separately and may be involved in selection of subcontractors
 - All work except CM@R fee is bid
 - Single point of accountability: CM@R signs contracts with all subcontractors.
 - Guaranteed maximum price
 - Enables fast-track delivery (construction begins before design is complete), saving time
 - Good for large, complex projects
- Disadvantages:
 - Negotiated CM@R fee is not competitively bid
 - Not suited for small projects

CONTINGENCIES:

- As a part of the overall project costs, and to cover unexpected expenses, the following contingencies should be included:
 - Owner’s Contingency: To cover:
 - Costs due to Owner’s change in scope
 - CM@R – GMP Contingency: To cover:
 - Scope gaps between trade contractors
 - Contract default by trade contractors
 - Unforeseen field conditions
 - Costs of corrective work not provided elsewhere
 - Design omissions which a prudent CM@R could not have reasonably detected during the pre-construction phase
 - Note: Any cost overruns in excess of this CM@R-GMP Contingency will be borne by the CM@R.

MISCELLANEOUS:

- The Architect/Engineer works directly for the Owner and owes no allegiance to, nor derives any benefit from, work of the CM@R, prime contractors, subcontractors, or manufacturers.
- The CM@R receives proposals from and awards contracts to first-tier subcontractors who have been pre-qualified.
- The contracts are between the CM@R and the prime or subcontractors. (not between the subcontractors and the owner)
- The final construction price is the CM@R’s fee and the subcontractors’ bids
- The CM@R provides a guaranteed maximum price (GPM). The owner will not pay more than the GMP and will retain any savings. There is sometimes an agreement between the owner and the CM@R to share any savings in a predetermined ratio.
- It is feasible to establish a guaranteed maximum price (GPM) at the conclusion of the Design Development Phase, provided contingencies are established to take into account this early date. (The state construction office recommends the GPM be based on the final approved construction drawings and specifications.)
- Because of additional up-front expenses in the form of fees payable to the CM@R, the CM@R method of project delivery is not recommended for smaller projects. (The N.C. University System recommends the use of CM@R only for those projects in excess of \$8 million value.) *
- CM@R is most useful if selected early in the design process (no later than the beginning of the Design Development phase is recommended)
- CM@R is not suitable for site-adapted re-use structures (prototypes)

* Recently a few school systems have been trying the CM@R delivery system for much smaller projects. The results of this will soon be known.

REPORTING REQUIREMENTS:

- General Statute 143-64.31(b) requires that a public entity contracting with a CM@R shall submit a report to the Secretary of Administration, listing certain information.

RESOURCES:

- American Institute of Architects (AIA) website: www.aia.org
 - Forms in the “CM” Series for CM@R
- Although the following resources are written specifically for state-owned projects, much applicable information such as check lists, general conditions, etc. will be useful to those facility personnel and designers planning to use CM@R:
 - N.C. State Construction Office (SCO) website: www.nc-sco.com
 - University of North Carolina System website: www.northcarolina.edu