

Alamance County Commissioners

Construction Delivery Models

Exploring Methods of Construction Contracting and Delivery

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The preparation of this document, intended as a guide for the ACC Board of Trustees in determining methods of construction delivery and contracting, borrowed heavily from public documents produced by the Office of State Construction – “State Construction Manual”, and the North Carolina General Statutes.

I. Introduction

The State of North Carolina, under General Statute 143-128, has required since the 1930's that public construction contracts be competitively bid in at least 4 subdivisions or branches of work – General, Plumbing, HVAC and Electrical contracts. "Separate plans and specifications" are required for each branch, and the Designer shall identify the scope of work required for each category in the specifications and on the drawings. There have been occasions when Elevators, Fire Protection Systems, Communications Systems and other specialty construction have been separate prime contracts as well, but not required by statute.

With changes effective January 1, 2002, with accompanying amendments at least five (5) times¹ since, multiple bidding and contracting methods have been allowed; dollar thresholds for contracts, bonds, and professional licenses were raised; owner preferred alternates were revised; and, Minority Business Enterprise (MBE) requirements and procedures strengthened.

II. Delivery Methods and Models

The following are the major methods of bidding and contracting public work currently available for public entities, as permitted by North Carolina General Statutes:

1. Single Prime Contracting

A **Single Prime** bid and contract with the Owner is permitted for any construction contracts of any dollar amount. G.S. 143-128 requires a single prime bidder to identify on the proposal form the sub-contractors selected for the subdivisions or branches of work for the four branches of work:

- (1) General construction;
- (2) HVAC;
- (3) Plumbing; and,
- (4) Electrical.

The sub's license number is not required by statute but may be requested. The subcontractor bid quote to the prime bidder shall not be requested. The single prime contractor whose bid is accepted shall not substitute any person as subcontractor in the place of the subcontractor listed in the original bid, except by permission of the Owner and in accordance with the statute.

Under G.S. 87-1, a contractor that superintends or manages construction of any building, highway, public utility, grading, structure or improvement shall be deemed a "General Contractor", and shall be so licensed. A 2004 revision to G.S. 87.1.1 allows a Project Manager or Electrical Contractor under G.S. 87 to contract directly as single prime with a Public Owner, and subcontract to other contractors, provided the total general construction work does not exceed 25% of the total construction costs.

¹ Amendments by Session Laws are as follows: 2002-159 section 42; 2007-322, Section 322; 2012-142, Section 9.4(g); 2013-401, Section 3; and, 2014-42, Section 2.

2. Separate/Multi-Prime Contracting:

Separate/Multi-prime bids and contracts are also an option for the Owner. G.S. 143-128 has established the basic subdivisions/branches of work similar to similar to **Single Prime** contracting. Here however the Owner signs separate prime construction contracts with each subdivision/branch contractor. Project documents have “separate specifications and drawings” prepared for each subdivision. The Owner must designate one Contractor, typically the General Contractor or the Contractor having the largest contract, as the “Project Expediter”, to coordinate and schedule the work. The Project Expediter has no contract with the other subdivision/branches of work HVAC, Electrical, Plumbing), so the general contractor definition in G.S. 87-1 does not apply.

3. Dual Bidding:

Dual Bidding, defined in G.S. 143-128 (d1), is a “**combination of bidding**” that permits **both Single Prime and Separate/Multi- prime** bids to be received together on one project, and permits the Owner to contract with the lowest separate prime bids, **or** the lowest single prime bid. In determining the award, consideration may be given to:

- The cost of construction oversight;
- Time for completion; and,
- Other factors as appropriate.

The lowest bid overall does not have to be accepted; however, awarding to other than the low bidder should have reasonable justification. Separate drawings and specifications shall be prepared for the dual method as well. Dual bids are to be received one-hour apart. Separate prime bids are received on the first hour but not opened. Then single prime bids are received on the second hour, and all bids received are then opened and read. Ex: 2:00 - Separate prime bids received but not opened. 3:00 - Single prime received. If sufficient bids are received, then all bids may be opened. Further, a bidder may withdraw or change their bid up until the first bid is opened.)

4. Construction Manager at Risk:

Construction Management at Risk (CMR) is a fourth authorized contracting method. The CMR may be used by the public entity only after a determination has been made that this delivery model is in the best interest of the project, and the public entity has compared the advantages and disadvantages of using CMP method for a given project rather than other methods. The CMR is selected on a qualification-based solicitation, typically at the beginning of the design process. The CMR works with the Owner and Designer, providing constructability input and cost estimating advice during design. The CMR must also provide a performance and payment bond to the public entity.

When the construction documents are reviewed and approved by regulatory agencies, the CMR provides a “**Guaranteed Maximum Price**” (**GMP**) to deliver the project. The CMR acts as a

Construction Manager to deliver the project. The GMP will be presented as either a **pre-bid GMP (Final)** or a **post-bid GMP (Preliminary)**. As suggested by the titles while the **Final GMP** is a fixed price, while a **Preliminary GMP** is subject to adjustment after the bids are received.

Options with the GMP: The Owner may accept, negotiate or decline the GMP offering and bid the work under another construction delivery method identified in this document.

If the GMP is accepted, the CMR is required by G.S. 143-128.1 (a) through (d) to:

- Act as a fiduciary of the Owner in the bid process. The CMR shall publicly advertise for and pre-qualify all “first tier subcontractors,” shall comply with the state MBE program requirements, and open all bids in a public venue. All bids become public records.
- The CMR may self-perform work only under limited circumstances.
- The Designer should familiarize themselves with the scope of work under this delivery method, and address this in their design contract, if necessary.
- The State Construction Office reviews and approves the construction document plans and specifications for the GMP.
- The CMR prepares the bid forms and bid packages.
- The Designer interprets the documents, approves products, issues addenda, change orders, etc. and performs contract administration.

5. Construction Manager as Agent

A **Construction Manager as Agent (CMA)** is not a construction contracting method. The CMA is an “agent” of the Owner similar to the Designer and is selected on a qualification-based solicitation and has a negotiated contract. The CMA prepares the trade packages and solicits the bids for the Owner, then provides scheduling and construction administration. However, all construction contracts are with the Owner, not the CMA. This is separate/multi-prime contracting, but may involve many more construction trade contracts with the Owner than just the HVAC, Electrical or Plumbing contracts.

6. Alternative Contracting Methods

A written request and presentation may be made to the State Building Commission for consideration of a contracting method other than those listed above. Application procedures are available from the State Construction Office. Examples of alternate methods are Design-Build, Design-Build-Bridging, and Public-Private Partnership. In approving an alternate contracting method, the State Building Commission cannot waive bidding.

A. Design-Build

A Design-Builder contract is an appropriately licensed person, corporation, or entity that, under a single contract, that provides design services and general contracting services. The services must be within the scope of practice of professional engineering or architecture; are performed respectively by a licensed engineer or licensed architect, where services within the scope of the practice of general contracting are performed by a licensed General Contractor. A public entity shall establish in writing the criteria used for determining the circumstances under which the Design-Build method is appropriate for a project. The criteria cited must address all of the following:

- The extent to which the governmental entity can adequately and thoroughly define the project requirements prior to the issuance of the request for qualifications for a design-builder;
- The time constraints for the delivery of the project;
- The ability to ensure that a quality project can be delivered;
- The capability of the public entity to manage and oversee the project, including the availability of experienced staff or outside consultants who are experienced with the design-build method of project delivery;
- A good-faith effort to comply with MBE participation goals; and,
- A comparison of the costs and benefits of using the Design-Build delivery method for a given project in lieu of the other delivery methods identified in #1 through #5 above

The public entity, in this case the community college, must go to greater lengths to justify this method of delivery, which are accompanied by additional complications. Further, the College must have or obtain skill sets to “manage and oversee the project”.

B. Design-Build-Bridge

Design-Build-Bridge is a design and construction delivery process whereby a governmental entity contracts for design criteria services **under a separate agreement from the construction phase services** of the **Design-Builder**. The design criteria for this method is defined as the requirements for a public project expressed in drawings and specifications sufficient to allow the Design-Builder to make a responsive bid proposal. A governmental entity shall establish in writing the criteria used for determining the circumstances under which engaging a design criteria design professional is appropriate for a project, and such criteria must address all of the same criteria required in Design-Build.

On or before entering into a contract for Design-Build or Design-Build-Bridge services, the public entity must select or designate a staff design professional, or a Design Criteria Professional who is independent of the Design-Builder, to act as its design professional representative for the procurement process, and for the duration of the design and construction. If the Design Criteria Professional is not a full-time employee of the public entity, the governmental entity shall select the Design Criteria Professional on the basis of demonstrated competence and qualifications. The design criteria design professional shall prepare a design criteria package equal to thirty-five percent (35%) of the completed design documentation for the entire construction project, including a statutorily defined list of requirements. The process gets only more complicated from here.

C. Public-Private Partnership

A **Public-Private Partnership** is defined as a capital improvement project undertaken for the benefit of a governmental entity and a private developer pursuant to a **development contract** that includes:

- Construction of a public facility or other improvements;
- Paving, grading, utilities, infrastructure;
- Reconstruction, or repair; and,
- May include both public and private facilities.

A development contract is defined as any contract between a public entity and a private developer. As part of the contract, the private developer is required to provide at least fifty percent (50%) of the financing for the total cost necessary to deliver the capital improvement project, whether through

lease or ownership, for the public entity. Labor or materials include all materials furnished or labor performed in the performance of the work required by a construction contract, whether or not the labor or materials enter into or become a component part of the improvement.