



AIA North Carolina
A Chapter of The American Institute of Architects



PREAMBLE

COMPLIANCE WITH JOINT COMMITTEE RECOMMENDATIONS

The architect-contractor recommendations in this book were developed and passed by the AIA North Carolina/Carolinas AGC Joint Cooperative Committee. The architect members of the Committee are appointed by the President of AIA North Carolina, while the contractor members are appointed by the President of the Carolinas Associated General Contractors of America, Inc.

These recommendations, while not mandatory since they are not laws, represent months, and in some cases, years of study by architect and contractor members of the Committee.

Many times it is discovered that a particular subject does not lend itself to a recommendation. Therefore, these recommendations cover only those matters which the authorized representatives of the AIA North Carolina and the Carolinas AGC feel should be offered to the construction industry as guidelines for an efficient and effective implementation of construction practice.

Cooperation by architects and contractors in the implementation of these recommendations is the goal of the Joint Committee. Any questions and/or suggestions regarding the recommendations should be directed to the Secretary of the Joint Committee:

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It is sincerely hoped that owners, architects, and contractors will recognize that these guidelines, which have been developed in the interest of all concerned, will be followed so that the work of those acting in your behalf will not be in vain.

These recommendations are available by visiting our web site: www.cagc.org or through www.aia-nc.org.

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AIA North Carolina

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Carolinan AGC
Building Your Business

JCR-1

Estimating Time

December 1973

October 1999

Recommendations:

The following is the period of time, in calendar days, that should be allowed between the date the construction documents are made available to the bidders until the date bids are due for various types of buildings.

Building Type	Cost of Project	Calendar Days Recommended Minimum
Structure of individual or complex requirements, such as apartments, auditoriums of theatrical or concert type, banks, cafeterias, church buildings, hotels and museums, scientific laboratories, stores and shops, student unions, YMCA and YWCA buildings and recreational centers.	Up to \$300,000	21
	\$300,000 - \$1,000,000	28
	\$1,000,000 and over	35
Structures of usual character, such as dormitories, gymnasiums, buildings for custodial care, laundries, libraries, office buildings, and industrial buildings.	Up to \$300,000	21
	\$300,000 - \$1,000,000	24
	\$1,000,000 and over	30
Structures of simple character such as storage garage, warehouses, loft buildings, and similar structures requiring only basic heating and lighting design.	Any amount	21

Comments:

Prior notice of bid call on larger projects will allow contractors to plan further ahead and avoid bidding conflicts.

End of JCR-1

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JCR-2

Bid Opening Time

December 1973

October 1975, April 1991, October 1992, October 1999, April 2007

Recommendation:

1. Bid openings should be held:
 - a. On Tuesday through Thursday excluding legal holidays and the day following legal holidays.
 - b. From 2:00 p.m. to 4:00 p.m., preferably 3:00 p.m. or later.
 - c. If multi-prime and single-prime bids are being sought, the multi-prime bids preferably should be due at 3:00 p.m., with the single-prime bids being due at 4:00 p.m. All bids should be opened at the same time, preferably at 4:00 p.m.
 - d. If single-prime bids are being sought, there should be a staggered bid receipt for the base bid, with the base bid being due first, and alternates and unit costs being due two hours later, when all base bids and alternates/unit costs would be opened. Back-up information (i.e., Historically Under-Utilized Business) would be due within twenty-four hours of the bid opening time.
 - e. Should a staggered-bid process be used, the architect/owner should consider the complexity of the project's bid process, which would include the number and/or complexity of the alternates and unit prices, as well as whether the project will be bid both as single-prime and multi-prime. For complex projects, a two-hour separation, referenced in paragraph d., should be used. Otherwise, the architect/owner may want to consider a one-hour separation.
 - f. No projects should be bid on the week of July 4, or the first and last week of the year.

Comments:

- A. Monday bids create a rush of mail and telephone sub-bids without adequate time for evaluation.
- B. Later afternoon bids allow more time and a better evaluation of sub-bids.
- C. Before setting a date and time for bid openings, architect shall check with local AGC Plan Room to avoid conflict with other bid openings.

JCR-2

- D. By staggering the time bids are due for multi-prime and single-prime bids, the contractor has more time to concentrate on each type of bid.
- E. Fax or tele-communication bids or modifications of bid are not acceptable under public bidding.
- F. Refer to House Bill #1327, for State Public Bidding School requirements.
- G. Revision to a bid on exterior of the envelope must be submitted by authorized personnel with a power of attorney (POA).
- H. Concerning the recommendations in 1. d. and 1. e. above, AIA NC recommends that if JCR-17 and JCR-23 are both adhered to, then there should not be a need for a staggered bid opening. JCR-17 states that unit prices should be eliminated except for pilings, caissons and rock. JCR-23 states that alternates should be kept to a minimum and no more than six.

End of JCR-2

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JCR-3

Plan Deposit Guarantee

December 1973

October 1975, September 1981, October 1994, October 1999, April 2004,
October 2004

Recommendations:

Plan deposit should approximate cost of reproducing plans and specifications. The minimum plan deposit should be \$50.00.

Comments:

- A. Plan deposit should be totally refunded to bidders who submit a bid to the Owner and return the documents in good condition within 10 days after notification of award or request to return plans. Deposits will also be returned to bidders not submitting bids, provided they notify the architect of their intention not to bid and return the plans within three days after receipt thereof or 15 days prior to bid date, whichever comes later. The Owner has the option of extending the refund of plan deposits to subcontractors, for the return of a complete set of documents.
- B. Costs for delivery of bid documents to the bidder should be borne by the architect. Costs for returning same should be borne by the bidder.

End of JCR-3

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JCR-4

Number of Sets of Bidding Plans and Specifications

October 1986

December 1993, April 1997, October 1999, October 2004

Recommendations:

1. The architect should judge from the complexity, size and scope of building project the number of bidding documents to prepare in advance to obtain maximum response to bid call.
2. On large and/or complex construction projects, the architect should issue, on deposit, two sets of complete bidding documents to each general contractor's request.
3. On projects bid under the separate contract system, all prime contractors will be provided one set of complete plans and specifications. Additional sets, if furnished, will include only the work being bid under a particular prime contract. For example, general, plumbing, electrical, etc.

Comments:

- A. Architect should advise owner of the advantages gained by giving contractors sufficient bidding documents to get the maximum number of sub-bid and material quotations to ensure cost savings.
- B. Architect should make available, at cost, individual plan sheets and/or individual specification sheets to suppliers and sub-bidders only when the request is made in writing and specifically requests plan sheets by number and specification by page number.
- C. Carolinas AGC, CMD and Dodge Plan Rooms should receive, free of charge, a sufficient number of sets of bidding documents at the time of initial issue. The number of sets provided should reflect the size and complexity of the project. Contractors and subcontractors should make use of electronic plan rooms in an effort to minimize wasteful printing and unnecessary expense to the Owner.
- D. Plans for all projects should be bound separately for general, plumbing, mechanical and electrical work when issued to the Plan Rooms. This would facilitate greater use of the plans by more contractors at one time. Architects are cautioned to include the plumbing, mechanical and electrical specifications, the general and special conditions which would apply to all contractors.
- E. Contractors should not deface or mutilate the bid documents. If extra work sheets are needed, they should secure them from the architect.

End of JCR-4

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JCR-5

Issuance of Addenda

December 1973

October 1975, May 1977, October 1994, October 1999

Recommendations:

1. If addenda are necessary, they should be issued as soon as possible, but in any event, not later than four (4) working days before receipt of bids.
2. When addendum requires major or extensive changes, an appropriate extension of the bidding period should be granted.

Comments:

In order that the architect may have sufficient time to prepare any necessary addenda, it is requested that all inquiries be made in time to reach the architect at least five (5) working days before receipt of bids.

End of JCR-5

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JCR-6

Error in Bid

December 1973

May 1977, October 1999

Recommendations:

1. If, after bids are opened, the low bidder claims he/she has made an appreciable error in the preparation of his/her bid and can support such claim with evidence satisfactory to the owner and the architect, he should be permitted to withdraw his bid.
2. If the owner and the architect permit the low bidder to withdraw his/her bid, then written notification should be given within 72 hours. His bid guarantee should be returned and he should be disqualified from again bidding on the project in the event additional bids are requested.
3. In such event, action on the remaining bids should be considered as though the withdrawn bid had not been received.
4. Under no circumstances should a bidder claiming an error be permitted to alter his/her bid after the bids have been opened.

Comments:

North Carolina General Statute 143-129.1 contains provisions for allowing a bidder to withdraw his bid on public work without forfeiture of the bid security when the bid contains a mistake that is clerical in nature.

End of JCR-6

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JCR-7

Listing of Subcontractors

December 1973

October 1975, May 1977, October 1987, October 1999, October 2003

Recommendations:

1. Single prime projects should require the identification of the following subcontractors on the bid form.
 1. Heating, ventilation and air conditioning.
 2. Plumbing.
 3. Electrical.
2. When alternate bids are required to be submitted, the bid form should contain the following:

"If the subcontractor for an alternate bid is different from subcontractor indicated for base bid, the prime contractor shall include the name of the subcontractor and the alternate affected in the space provided below."

Subcontractor _____ Alternate # _____

Subcontractor _____ Alternate # _____

Subcontractor _____ Alternate # _____

3. Listing of the remaining subcontractors (i.e. painter, drywall, etc.) should be omitted from bid forms but provided within 30 days after award.

Comments:

- A. Current North Carolina Statutes require the listing of the mechanical, electrical and plumbing contractors on the bid form.
- B. Alternates may change the listed base bid subcontractor to a different subcontractor and the bid form should have a clause to show this change.
- C. The remaining subcontractors and material supplier cannot be determined until after selection of the alternates and a review of their scope of work. This is a time consuming review and cannot be completed prior to submitting of the bid.
- D. AIA A201 General Conditions 1997 Edition, Article 5, Section 5.2, adequately provides for approval of subcontractors by the owner.

End of JCR-7

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(THIS JCR, WHICH HAS BEEN APPROVED BY CAGC BOARD OF DIRECTORS, HAS NOT BEEN APPROVED BY AIA NC BOARD OF DIRECTORS AND WORK IS CONTINUING BY AIA NC AND CAGC IN REVISING THIS DOCUMENT.

JCR-8

Retainage for Private Work

December 1973

October 1975, May 1983, October 1987, October 1999, July 2008

Recommendation:

- A. The owner should not retain more than five percent (5%) of any periodic payment due a prime contractor.
- B. While the retainage provision of Paragraph A is recommended, it is acknowledged that corporate policies of private owners may require a retainage of 10% throughout construction.
- C. When the project is fifty percent (50%) complete, the owner, with written consent of the surety, should not retain any further retainage from periodic payments due the contractor.
- D. If the owner determines the contractor's performance is unsatisfactory, the owner may reinstate retainage for each subsequent periodic payment application up to the maximum amount of five percent (5%).
- E. Upon substantial completion, the owner may retain sufficient funds to secure completion of the project or correction of work, not to exceed two and one-half times the estimated value of the work to be completed or corrected.
- F. Any reduction or release in the amount of the retainage on payments shall be with the written consent of the contractor's surety.
- G. The existence of any third-party claims against the contractor or any additive change orders to the construction contract should not be a basis for delaying the release of retainage on payments, however, the owner should not be prevented from withholding payment to the contractor for unsatisfactory job progress, defective construction not remedied, or third-party claims filed against the owner.

Note: Public work is governed by General Statutes.

End of JCR-8

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JCR-9

Number of Sets of Plans and Specifications for Construction

December 1973

October 1987, April 1988, October 1999

Recommendations:

The architect or engineer will furnish free of charge to the contractors complete copies of plans and specifications as follows:

Single Contract

Twenty (20) complete sets of plans and specifications.

Separate Contract

General Contractor at least fifteen (15) sets of general contractor drawings and specifications; at least seven (7) sets to include drawings and specifications of all other contracts.

Each other contractor at least six (6) sets of the appropriate drawings and specifications; at least three (3) sets to include drawings and specifications of all other contracts.

Comments:

- A. The specifications should state that a stipulated number of sets of plans and specifications will be furnished to the contractor for the purpose of construction. The contractor will be required to pay for the sets over and above the stipulated number to be furnished.
- B. The specifications should state the cost per set so the contractor may estimate the cost of the sets he will be required to purchase.

End of JCR-9

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JCR-10

Punch Lists & Final Inspection

December 1973

October 1975, October 1999, October 2000, July 2008

Recommendations:

1. Before the contractor indicates to the architect and owner that, in the contractor's opinion, the project is complete, the contractor shall conduct a thorough inspection of the work of all trades and subcontractors on the project. The contractor shall prepare a punch list that identifies any repairs or deficiencies that will need to be corrected prior to final inspection.
2. The architect shall not schedule or conduct the final inspection of the project until the contractor has furnished written notification to the effect that the punch list inspection of the project was made and all deficiencies were corrected.
3. The architect has discretion to terminate the final inspection if the project is not completed to the extent indicated by the contractor.

Comments:

- A. The owner, architect and contractor shall conduct the final inspection together, immediately after the contractor gives assurance that work is complete. The contractor shall add any repairs or corrections identified during this inspection to the punch list and shall complete all punch list items prior to the owner's final acceptance of the project.
- B. Punch list items should be numbered.
- C. The contractor's inspections and punch list shall be complete and comprehensive so that it is not necessary to add new items on a subsequent list.
- D. Prompt decision by the architect is desirable in distinguishing between those items properly classified as punch list items and items more practicably coming under conditions of the guarantee period.

End of JCR-10

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JCR-10

- E. Retainage shall be released upon substantial completion of all related work that satisfies the intent of the drawings and specifications. However, at the architect's discretion, retainage can be adjusted for incomplete work until these items are completed.

End of JCR-10

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JCR-11

MASTERFORMAT Index

December 1973

May 1984, October 1999

Recommendations:

Insofar as practical, MASTERFORMAT for construction specifications should be used by architects and contractors.

Comments:

- A. MASTERFORMAT supercedes The Uniform Construction Index, which replaced the AIA filing system.
- B. It is of considerable value in categorizing specifications.
- C. It provides an excellent check system for architects and contractors as a guard against omissions in estimating and bidding.
- D. MASTERFORMAT is available from:

The American Institute of Architects
1735 New York Avenue, NW
Washington, DC 20006-5292

or

The Associated General Contractors of America, Inc.
333 John Carlyle Street, 2nd Floor
Alexandria, VA 22314

or

Construction Specifications Institute
99 Canal Center Plaza, Suite 300
Alexandria, VA 22314

End of JCR-11

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JCR-12

Contracting Method

October 1974

October 1999

Recommendations:

The single contract method of construction should be followed where such procedure is not prohibited by law.

Comments:

- A. Experiences of the construction industry have demonstrated that lowest costs and maximum efficiency in the construction of a project, which requires interlocking operations, are secure when undivided responsibility for its execution is placed upon an experienced and competent general contractor through the award of one general contract.
- B. Agencies of the federal government have recognized the value of the single contract system and almost without exception use that procedure.
- C. Because of its simplicity of administration, the single contract system is generally considered to be the most satisfactory.

End of JCR-12

This recommendation is the result of considerable discussion and deliberation by the Architect and General Contractor members of the Joint Cooperative Committee of AIA North Carolina and the Carolinas AGC. While its provisions are not binding on individual Architects or General Contractors, the committee believes that adherence to the recommendations will benefit the Owner and the Construction Industry in general.



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JCR-13

Supplemental Hold Harmless Clauses

October 1974

May 1977, October 1999

Recommendations:

The "hold harmless" provisions contained in AIA A201 General Conditions 1997 Edition, incorporated in a construction contract provide adequate and equitable protection to all parties of the contract and no supplemental "hold harmless" clauses should be included. Any added supplemental clauses of this nature could constitute a demand from the owner that the contractor assume liability for events over which the contractor may have no control. The specifier should not ask for protection for the owner or others beyond that which can be definitely defined and clearly covered by an insurance carrier.

Comments:

- A. Insurance underwriters are insisting the specific nature of insurance risk be defined.
- B. Many contractors have been advised by their insurance carrier not to submit bids on projects carrying supplemental "hold harmless" provisions. This reduces the competition and may result in substantially higher bid prices.
- C. Contractual blanket liability insurance carriers, even though writing the insurance, insists on certain exposure exceptions, which may affect the intended coverage.
- D. Contractual blanket liability insurance is an added cost which is eventually borne by the owner.
- E. Court cases have indicated it is nearly impossible to recover under the broad term of "hold harmless" insurance.

End of JCR-13

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JCR-14

Pre-Construction Conference

October 1974

October 1975, October 1999

Recommendations:

Promptly after award of a contract, a pre-construction conference should be held. A letter of notification of the pre-construction conference, to be attended by appropriate representatives of the owner, architect, engineers, contractor, major subcontractors, utility representatives, etc., should be written to all parties by the architect in charge of the project. The letter should include a discussion checklist. All parties involved in the project should, prior to the conference, add any additional items which they wish discussed.

Comments:

A. The following information should be furnished by the architect:

1. Names of architect representatives and specific assignments.
2. Reports and completed forms required from the contractor.

B. Information to be furnished by contractors:

1. Project Manager: Name, Address, Phone Number.
2. Superintendent: Name, Address, Phone Number.

C. Information furnished by the owner:

1. Owner's representative: Name, Address, Phone Number.
2. Provisions and procedures for payment.
3. Owner's insurance coverage (Builder's Risk, etc.)
4. Site security provided.

D. Discussion Checklist: (Suggested Guide)

1. Contractor's plan of operation, including a GPM Schedule.
2. Approval of qualified subcontractors.
3. Names of principal suppliers.

JCR-14

4. Provision for inspection of materials.
5. Responsibility for locating existing utilities.
6. Responsibility for damage to utilities.
7. Time schedule for relocation of utilities.
8. Shop drawing submittal and approval procedures.
9. Acceptance and approval of work procedures.
10. Labor compliance, payrolls, certifications.
11. Safety regulations for contractors' and owners' employees.
12. Proof of adequate property damage and liability insurance.
13. Suspension of work and time extensions.
14. Change order procedures.
15. Procedures for submission of applications for payment.
16. Any interpretation of plans and specifications requested by contractor.
17. Any conflicts or omissions in plans and specifications.
18. Traffic control.
19. Processing and administration of third party complaints.
20. Substitutions of materials or methods.
21. Cash flow schedule.
22. Schedule and format for job meetings.
23. Job site cleanup responsibility.
24. As-built prints maintained.

JCR-14

- E. Representatives of all involved utilities should have the authority and knowledge to discuss location of utility, time schedule for relocation, emergency action in event of damage to utility, etc.

End of JCR-14

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JCR-15

Door Numbering and Scheduling

October 1974

October 1999

Recommendations:

1. Each door opening on floor plans should be designated by a different number.
2. Door schedule should be shown on the plans and should contain these numbers in consecutive order with all requirements for each particular opening number appearing on the line item.

Comments:

- A. Different number for each opening will assure proper coordination among millwork sub, door supplier, hardware supplier and metal frame supplier.
- B. On cartoned and/or numbered doors, contractor at job site will have easier job in distribution of doors to appropriate opening.
- C. Door lights, louvers, undercut, "B" label, acoustical, etc., indicated as such on each appropriate numbered door schedule line item will assure one source of information for each opening.

End of JCR-15

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JCR-16

Certification of Substantial Completion

October 1974

October 1975, October 1999, July 2008

Recommendations:

The nationally approved AIA Form G704 (Certificate of Substantial Completion) is the preferred method of documenting substantial completion and owner's feasibility to occupy.

Comments:

A. Execution of this form:

1. Establishes the date of substantial completion and mutually agreeable date of occupancy.
2. Establishes schedule for completion of remaining work.
3. Establishes the commencement of all warranties and of all guarantees.

B. Refer to JCR-8 retainage recommendation on uncompleted items of work.

End of JCR-16

This recommendation is the result of considerable discussion and deliberation by the Architect and General Contractor members of the Joint Cooperative Committee of AIA North Carolina and the Carolinas AGC. While its provisions are not binding on individual Architects or General Contractors, the committee believes that adherence to the recommendations will benefit the Owner and the Construction Industry in general.



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JCR-17

Unit Prices

October 1974

October 1975, May 1983, October 1999

Recommendations:

1. Unit prices, except for piling, caissons and rock should be eliminated from the bid documents.
2. Unit price proposals, when used, should provide separate blanks for both ADD and DEDUCT prices on each item.

Comments:

- A. Cost of extra work, normally covered by unit price, should be negotiated after the type, quantity and character of the work is determined, since all these factors have a bearing on the unit cost.
- B. Unit prices for rock excavation should be listed on the bid proposal for each category of rock removal distinguishing between rock in trenches or footings and mass and all other conditions of removal.
- C. Recommend the architect encourage owners to obtain adequate sub-surface data (test borings, soil analysis, etc.) as required to pre-design the foundation systems.
- D. Boring logs should be included in construction documents for information only.

End of JCR-17

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JCR-18

Construction Coordination Meetings

October 1974

October 1975, September 1979, October 1999

Recommendations:

At the pre-construction conference on projects requiring additional coordination, the general contractor shall submit a detailed job progress schedule with sufficient copies for the architect, owner and separate prime contractors if applicable. Within a period of seven (7) days, all parties shall concur in writing with this schedule or request modifications. It is important that all parties agree to a progress schedule at this preliminary stage of construction.

Subsequent to the beginning of construction, job progress weekly meetings shall be held. The project manager or the superintendent for the general contractor shall conduct the meeting and keep minutes. These minutes shall be mailed to all parties involved in the meetings as soon as possible.

Weekly meetings shall be attended by the representatives (usually superintendents or foremen) of the contractors, subcontractors and other parties involved with the phase of the work that is in progress or scheduled for the ensuing weeks. A representative of the architect shall attend.

The job progress weekly meeting format shall include:

- Name of project and date.
- Names of persons and firms represented.
- The general contract work schedule for the week.
- Work to be accomplished by each contractor or subcontractor.
- Commitment of each party to their aspect of the work.
- General agreements between parties on coordination.
- Lack of any materials or equipment that might affect the progress.

At the end of the minutes to be distributed, the following statement should be included: If anyone in attendance finds that they do not agree with the minutes as written, they should contact the writer prior to the next meeting. Otherwise, the general contractor will assume that all commitments will be carried out.

Comments:

Good and constant communications between all parties involved in the construction of a project will produce the best results for the owner, the architect and the contractors.

End of JCR-18

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JCR-19

Early Approval of Contract Documents For Permitting Purposes

October 1974

April 1988, October 1998, October 1999

Recommendations:

The review and approval of construction project documents at both the local/state and federal levels has become more detailed and time consuming. Projects that require local historic, landscape and appearance reviews, as well as the normal building code reviews, may require several months to work through the approval process.

Comments:

1. The owner, architect and other design consultants should start the preliminary project review process with local and state agencies early in the design process, with subsequent submittals as required for preliminary approvals.
2. Projects requiring special review and approval (i.e., local historic or appearance) should be submitted and approvals obtained prior to completion of the contract documents.
3. The architect should start the building permit process by submitting final contract documents to the building code agencies (local and/or state) as early as possible and no later than when the project documents are released for bidding or negotiating.
4. When the project is awarded, the contractor should continue the process and obtain the final permits.
5. Payment for permit shall be the responsibility of the contractor involved.

End of JCR-19

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JCR-20

Substitution of Materials

October 1974

October 1975, October 1999

Recommendations:

1. Approval of substitutions of materials, processes, or equipment shall be the responsibility of the architect/engineer.
2. Once a project is out for bids, project should be bid as specified. No substitutions should be approved until after receipt of bids and it should be the responsibility of the contractor to prove equality.

Comments:

- A. Three (3) or more acceptable materials or products should, where possible, be listed by the architect/engineer in the contract documents.
- B. All requests for substitutions of materials should come from the general contractor and not from the supplier of the material under consideration.

End of JCR-20

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JCR-21

Inspection and Lab Tests

October 1974

October 1990, October 1999

Recommendations:

Unless all testing is paid by owner, the exact number of inspection and lab tests of all kinds should be specified. This is to include all tests by number and description that are to be paid for by the general contractor and/or subcontractors.

Comments:

- A. The architect should set forth in the appropriate division of the specifications complete information regarding inspection and tests.
- B. Architect should clearly specify who is to pay for testing in the various divisions.
- C. All tests must be made by a laboratory acceptable to the architect and owner.
- D. Any costs associated with trip charges when no testing occurred shall be paid by the responsible prime contractor.
- E. The architect should be certain that the owner understands the method and costs of testing in order that his budget includes this expense (if testing is not an allowance in the general contract).
- F. If it is impractical to specify type and number of tests, an allowance to cover testing should be specified.
- G. The architect should understand that many government agencies require three bids to be received for the work.
- H. If materials fail on the first test, the contractor will pay for additional tests.

End of JCR-21

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JCR-22

Award of Contract

October 1974

October 1975, April 1988, October 1999, April 2004, October 2004

Recommendations:

Architects should encourage earliest possible award of contract after receipt of bids. The maximum interval between bid and award should be clearly noted in "Instruction to Bidders" and should be held to thirty (30) days or less.

Comments:

- A. Contractors should take special care to insure that sub-bidders' quotations will be effective for the specified interval.
- B. "Time for Completion" should be computed from the date of signing the contract, or receipt of applicable permits, or "Notice to Proceed," whichever is later.
- C. Extended delay in award of contract ties up bidders' staff, bonding, etc., which adversely affects construction costs (and bids).
- D. Architects should UNOFFICIALLY keep bidders posted as to progress of owners toward award of contract. (Architect should not place himself/herself in the position of being responsible for the premature ordering of materials, etc., by the contractor.)
- E. Contractors should return signed contracts within seven (7) days of receipt thereof.
- F. A general contractor should respond, in a timely manner, to an inquiry from a subcontractor or supplier as to the status of their proposal.

End of JCR-22

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JCR-23

Alternates

October 1974

October 1975, October 1999

Recommendations:

1. Alternates should be kept to an absolute minimum.
2. Only additive alternates should be considered.
3. Alternates should be considered in sequential order in determining the low bidder.

Comments:

- A. If alternates are required, they should be limited to six (6) if at all possible.
- B. Alternates should be carefully defined and pertinent.
- C. Owners should be advised by the architect on the need to minimize the use of alternates.
- D. Alternates involving multiple trades should be included in the initial documents and should not be added by addendum.
- E. In the event that deductive alternates are required, all alternates should be deductive. A combination of additive and deductive alternates should not be used.

Alternates

It is the contention of building contractors that lower basic bids can be quoted when alternate bids are not involved. When alternate bids must be evaluated during the final stages of bid preparation, time for proper analysis is not available. The tendency for the contractor is to protect himself. This usually means a higher bid to the owner.

The following situation involving only painting quotations with four alternates is an example:

JCR-23

<u>Painter</u>	<u>Basic</u>	<u>Alt #1</u>	<u>Alt #2</u>	<u>Alt #3</u>	<u>Alt #4</u>
		(+)	(+)	(-)	(-)
A	10,000	4,000	2,000	(1,500)	(3,000)
B	13,000	2,000	500	(500)	(2,000)
C	15,000	1,000	2,000	(3,000)	(5,000)
D	11,000	2,000	3,000	(2,000)	(2,000)

The low bidder would be as follows:

Base Bid	A
Base + #1	D
Base + #1 and #2	B
Base + #1, #2 and #3	D
Base + #1, #2, #3 and #4	C

Many other combinations are available such as base + alternates 2 and 4, base + alternate 3, base + alternates 1 and 4, etc.

The general contractors do not know which alternates will be accepted. He/She will probably bid using Painter A in the example showing. If the basic bid plus alternate #1 is accepted, the owner will be paying \$1,000 more than he should because Painter D is low on this particular combination.

With the possibility of this situation occurring for several other subcontractors and material suppliers, the general contractors' dislike for alternate bids is clearly seen.

End of JCR-23

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JCR-24

Negotiating and Rebidding

October 1974

April 1988, October 1999

Recommendations:

If at all possible, negotiate with low bidder. Re-bidding for a contract should be avoided.

Comments:

If re-bids are necessary, new bids should not be solicited until (1) sufficient time has elapsed to induce different cost factors in labor or material components, or (2) design changes will bring the project cost within the funds available. As a general rule, three months should be the minimum time between the initial and subsequent bidding unless the project is redesigned. Where redesigning takes place, the changes in project requirement should be such as to effect a substantial change in bidding.

End of JCR-24

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JCR-25

Meetings With Subcontractors At Project Site

October 1975

October 1999

Recommendations:

1. Before any subcontractor begins his phase of any project, the contractor should arrange a meeting at the project site with the general contractor's superintendent, a responsible party of the subcontractor's firm and the foreman who will be in charge of the work for the project. During this meeting, the contract documents and approved shop drawings are reviewed and questions answered. The architect should be advised of time and place of such meetings in the event that he may wish to attend.
2. Subcontractors should be encouraged to have one foreman during an entire project.
3. Subcontractors should attend weekly progress meetings if their work is in progress, or if soon to take place.

End of JCR-25

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JCR-26

Public Work Contract Change Orders

October 1975

April 1988, October 1999, April 2004

Recommendations:

Change orders may be initiated by prime contractors and/or architects-owners. The mechanism used in notification for contractor or subcontractor initiated changes is the Request for Information (RFI). When owner-architect supplies an answer to the RFI or initiates a change of scope through a Construction Change Authorization (CCA), the answer to the RFI or the CCA must be reviewed for change in scope, increased or decreased costs and schedule impact.

Comments:

- A. For any prime contractor proposals for change orders involving any extension of time, all subcontractors shall be advised for possible effect on their contract.
- B. A change order document will define all the contractor's costs that are to be reimbursed, including rates of labor, equipment, subcontractor's overhead and profit.
- C. Normally allowed the prime contractor is 10% markup for overhead and profit on subcontractor's performed work. Subcontractors are allowed 15% markup only. For work the prime contractor self performs, the markup allowed is 20% for overhead and profit. (The standard markup noted above may not adequately cover administration costs for small change orders.)
- D. It is essential to review the General Conditions of the contract documents thoroughly to understand the contractual rights and procedures regarding changes.
- E. If it is apparent that a change order will not be authorized by the owner-architect, then formal claim procedures must be initiated immediately.
- F. **ISSUANCE OF CHANGE ORDERS TO SUBCONTRACTORS/SUPPLIERS:** After formal approval has been received, change orders must be written to subcontractors and material suppliers, adjusting their original agreements in accordance with their bids on the change of work.

End of JCR-26

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JCR-27

Request for Change Quotation

October 1975

October 1999

Recommendations:

The request for change quotations is generally initiated by the owner or architect, and should be specific and properly documented.

Comments:

- A. The request for the proposal should include all information needed by the contractor to make a fair, reasonable and realistic estimate of the work.
- B. Supplementary or revised drawings in sufficient copies to permit the contractor to solicit proposals from obviously involved contractors (minimum 6).
- C. A statement of a reasonable expectation of when the change quotation is to be made and, where possible, indicate a reasonable time for consideration of the change by architect and owner and written approval and disapproval to the contract.
- D. Written confirmation to proceed should be given to the contractor if official final approval is a lengthy process. (This will allow work to proceed and protect the architect, contractor and/or subcontractor.)

End of JCR-27

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JCR-28

Bidder Pre-Qualification - Private Work

October 1975

October 1999

Recommendations:

Architect should secure the owner's approval of all prospective bidders prior to issuing bidding documents.

Comments:

- A. It is unfair to both the bidder and owner to wait until after the bids have been received before determining whether or not the low bidder should be awarded the contract.
- B. Contractors who have limited financial resources, inadequate or inexperienced organizations, or commitments that already involve them to the limit of their capacity, should be deleted from consideration.
- C. Refer to requirements of governmental agencies pre-qualification procedures.

End of JCR-28

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JCR-29

Owner's Financial Responsibility

October 1975

October 1999

Recommendations:

The bidding documents should provide the full name and address of the owner and/or party responsible for funding the project. Owner's finance should be assured prior to bidding the project. (Private work in particular.)

End of JCR-29

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JCR-30

Code Compliance

October 1975

May 1977, October 1999

Recommendations:

The respective responsibilities of the architect and contractor for compliance with all applicable codes and regulations are delineated in Articles 3.2 and 3.7 of AIA A201 General Conditions 1997 Edition. These paragraphs should be used as a guideline in the preparation of bidding documents.

End of JCR-30

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JCR-31

Field Record Drawings

October 1975

May 1977, October 1999

Recommendations:

AIA A201 General Conditions 1997 Edition adequately provides for field record drawings and should not be modified.

Comments:

- A. The contractor's responsibility for field record drawings should not extend beyond furnishing the architect a set of record prints marked to indicate changes made during construction.
- B. If the owner desires a permanent set of field record drawings (sepia), he should engage the services of the architect to furnish and revise the drawings accordingly. In many owner-architect contracts, field record drawings are required.

End of JCR-31

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JCR-32

Construction Time For Projects

May 1977

September 1979, April 1991, October 1999

Recommendations:

1. The bidding documents should specify the number of calendar days allowed for construction, particularly on projects utilizing separate contracts.
2. The total number of calendar days stipulated for construction should include, and so designate, the number of working days allowed in the construction time for normal bad weather.
3. Normal bad weather days should be those days on which precipitation is 0.10 of an inch, or greater, or any day the temperature fails to exceed an average of 40° F and that bad weather shall have had an adverse effect on the schedule.
4. If the total accumulated number of working days lost due to bad weather, from the start of work until the project is completed, exceeds the total number of days allowed in the construction time for normal bad weather, the time for completion should be extended by the difference.
5. The normal bad weather days and any time extension should be based on the Local Climatological Data Sheets compiled and published by the National Climatic Center, Asheville, North Carolina, and on daily weather logs kept on the job by the contractor reflecting the affect of the weather on progress of the work as initialed by the architect's representative.
6. Bad weather days that have delay consequences beyond the day of occurrence should be considered as lost construction days. For example, at phases of the job when clearing, foundation work, slabs on grade, masonry, etc., are in progress, several days can be lost due to rain, snow or freezing temperatures before conditions are suitable to proceed with construction. This, of course, is a judgment call between the architect and contractor and should be considered if contractor requests additional contract time.

Comments:

- A. Specifying the number of calendar days for construction in the bid documents allows for competitive bidding on an equal basis.

JCR-32

- B. When time is of the essence on any private project, contractors should be notified that the project will be awarded on a price and/or time basis.

End of JCR-32

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JCR-33

Invited Bid List

May 1977

May 1983, October 1999

Recommendations:

If a private owner elects to restrict bidding to an invited list of bidders, the following procedures are recommended:

1. No more than six (6) bidders should be invited to bid on the project.
2. The contractors should be advised of the names of the firms being invited to bid on the project.
3. The contract should be awarded to the lowest bidder.

Comments:

- A. Extreme care should be taken by architects to differentiate between soliciting bidders to bid on a project having an unrestricted number of bidders and inviting bidders to bid on a project restricted to an invited bid list.
- B. Contractors should respect the invited bid list and not apply pressure on the owner to get on the list when they have not been invited.

End of JCR-33

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JCR-34

Guarantees and Warranties

May 1977

October 1999

Recommendations:

All guarantee and warranty items exceeding one year in duration and/or having special requirements should be specifically itemized in the Special Conditions of the Contract Documents as well as in the appropriate sections of the specifications.

Comments:

- A. Guarantees and/or warranties should be based on normal practice and unrealistic or overly inclusive requirements should be avoided.
- B. As a minimum, the Contract Documents should provide the following information:
 - 1. What is the guarantee or warranty?
 - 2. What is the extent of the guarantee or warranty?
 - 3. By whom is the guarantee to be made - the prime contractor, others? Guarantee may require a certificate or a principal guarantee from subcontractor, supplier and/or the manufacturer.
 - 4. How long is the guarantee or warranty. One year is stipulated in the AIA General Conditions 1997 Edition.
 - 5. Effective dates of guarantee.
 - a. Be specific and document.
 - b. Beginning of the guarantee is ideally and normally the date of substantial completion. The date of substantial completion of the work, or designated portion thereof, is the date certified by the architect when construction is substantially complete, in accordance with contract documents so the owner may occupy the work, or designated portion thereof, for the use of which it is intended.

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- c. If portions of the project are occupied prior to completion or acceptance of the entire project, then guarantees should begin on these portions at the time of occupancy.

End of JCR-34

This recommendation is the result of considerable discussion and deliberation by the Architect and General Contractor members of the Joint Cooperative Committee of AIA North Carolina and the Carolinas AGC. While its provisions are not binding on individual Architects or General Contractors, the committee believes that adherence to the recommendations will benefit the Owner and the Construction Industry in general.



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JCR-35

Bid Bond Forms

May 1977

May 1983, October 1999

Recommendations:

The type of bid bond form required should be designated in the bidding documents for all projects.

Comments:

- A. Federally funded project may require the use of the federal agency's form.
- B. The use of improper bid bond forms on public work can result in bids being rejected.
- C. Contractors should require their bonding agents to furnish the bond on the form provided in the bidding documents.
- D. Bid Bonds are required for both Single Prime and Multi-Prime bid packages.

End of JCR-35

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JCR-36

Temporary Heat, Cooling, Ventilation, Lights & Utility Services

May 1977

October 1997, October 1999

Recommendations:

The following should be included in the Supplementary General Conditions:

Each prime contractor shall provide necessary and adequate facilities as they relate to his contract work and as required for the completion of the project in accordance with the contract documents. Any permanent meters installed shall be listed in the project expeditor's name until substantial completion.

In the event the project does not require the services of a particular prime contractor, then the general construction contractor will provide the temporary utilities normally furnished by that prime contractor.

Each prime contractor is responsible for:

1. Installation, operation, maintenance and removal of each temporary service or facility usually considered as its own normal construction activity.
2. Plug-in electric power cords and extension cords, and supplementary plug-in task lighting and special lighting necessary for its own activities.
3. Its own field office, complete with necessary furniture, utilities and telephone service.
4. Its own storage and fabrication sheds.
5. Special or unusual hoisting requirements, including hoisting material or equipment into spaces below grade, and hoisting requirements outside building enclosure.
6. Collection and disposal of its own hazardous, dangerous, unsanitary or other harmful waste material.
7. Secure lockup of its own tools, materials and equipment.
8. Construction aids and miscellaneous services and facilities necessary exclusively for its own construction activities.
9. Water hoses, etc.

JCR-36

10. Arranging for authorities having jurisdiction to inspect and test each temporary utility before use. Obtain required certificates and permits.
11. Drinking water for its own employees.

Temporary Electrical Service, Wiring & Lights:

1. Temporary electrical service, power wiring distribution and lights shall be furnished, installed, maintained and removed by the electrical prime contractor.
2. Temporary electrical service, wiring and lights shall, as a minimum, include the following unless the designer has specified a more stringent requirement:
 - a. 100 amp panel, pole mounted adjacent to foundation excavation with 1-220 volt outlet and 8-110 volt outlets.
 - b. 100 amp service for each prime contractor's office trailer and the specified office trailers of the owner, architect, engineers, etc.
 - c. 100 amp panel for each 20,000 sq. ft. of floor area or one on each floor with less than 20,000 sq. ft. with 15 and 20 amp outlets.
 - d. 5 foot candles of light at the floor in open spaces.
 - e. 10 foot candles of light at the floor in corridors and stairs.
 - f. Job requirements in perimeter site lighting when specified.
 - g. Install an outlet at each floor for the heat trace on the temporary water lines.
3. Temporary lighting for areas of 100 square feet or less will be provided by the trade requiring the lighting.
4. When the complexity of the project requires a temporary electrical power riser diagram and typical lighting layout, the architect/engineer shall include this in the bidding documents.

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Permanent Power & Wiring:

1. The electrical prime contractor shall have the building's permanent power wiring distribution system in sufficient readiness and shall provide electrical power as required by the HVAC prime contractor for temporary climatic control.
2. The electrical prime contractor shall also have the permanent power wiring distribution in sufficient readiness for the use of other contractors such as elevator contractors.
3. The electrical prime contractor shall have sufficient permanent wall outlets ready for use by other contractors when the temporary service is removed.
4. All metered electrical power costs, both temporary and permanent, will be paid for by the project expediter named by the owner until the meters are re-listed in the owner's name.

Permanent Lighting System:

1. The electrical prime contractor shall have the building's permanent lighting system ready at the time the general prime contractor begins the building finishes and shall provide adequate lighting in those areas where finish is being performed.
2. When the permanent lighting system is used during the finishing stages, all lamps shall be burning at the time of final inspection. The electrical prime contractor shall turn over to the owner a sufficient number of lamps and ballasts to equal 5% of each type used in the project for installation by the electrical prime contractor during the warranty period.

Temporary Toilet Facilities And Water:

1. The plumbing prime contractor shall provide the project requirements of water distribution.
2. Piped water shall, at a minimum, be furnished to each floor of the building and other locations that the type of construction may require.
3. All metered water costs will be paid for by the project expediter named by the owner.
4. Temporary water lines shall be freeze protected by the plumbing prime contractor with insulation or heat trace or both.
5. The project expediter will be responsible for providing the job requirements of temporary chemical toilets.

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Comments:

1. The architect shall make every effort to convince the owner that it is in everyone's best interest for the owner to pay all metered utility costs.
2. The architect shall take into consideration extending the specified warranty period for equipment and materials that are used in providing temporary utilities.
3. The architect/engineer is requested to include the warranty requirements in the technical sections of the specifications as well as in the General Conditions section, especially in the P M & E sections.

End of JCR-36

This recommendation is the result of considerable discussion and deliberation by the Architect and General Contractor members of the Joint Cooperative Committee of AIA North Carolina and the Carolinas AGC. While its provisions are not binding on individual Architects or General Contractors, the committee believes that adherence to the recommendations will benefit the Owner and the Construction Industry in general.



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JCR-36A

Temporary Job Site Utility Energy Cost

April 1998

October 1999

Recommendations:

Architect should advise both public and private owners of the option to allow the architect to structure the General and Supplementary Conditions so that the owner pays the actual cost of the temporary utilities and fuel.

Temporary Electricity Cost:

1. The owner would be responsible for the temporary electricity cost from the date the temporary electrical service is installed through the completion of the project.
2. Electricity for tower cranes, material hoist, personnel hoist, etc., would be provided and paid for by the trade requiring the facility unless the specifications required that such facilities be furnished by a particular trade for use by all trades on the project, then the owner would pay for the electricity.
3. The owner would not pay for electricity required for job site offices and storage facilities of the contractors.

Temporary Heating, Cooling and Ventilating Fuel Cost:

1. The owner would be responsible for paying for fuel required for the temporary heating, cooling and ventilating beginning at the time the prime HVAC contractor is required to furnish these services. This would also apply if the HVAC prime contractor uses a heating, cooling or ventilating source other than the building permanent system so long as the method of calculating the fuel used is accurate.

Temporary Water And Sewage Disposal Cost:

1. The owner would be responsible for the cost of temporary water and sewage disposal charges from the date the services are connected until the completion of the project including when the permanent meters are installed and sewer connections are made.
2. The owner would not be responsible for any chemical toilet costs.

JCR-36A

General:

1. All temporary and permanent meters will be listed in the project expediter's name.
2. The project expediter will bill the owner monthly for the temporary utility fuel and energy cost.
3. If the project completion date is extended past the contract completion date through no fault of the owner, the fuel and energy cost for the temporary utilities for the extended period will be a consideration of the liquidated damages.
4. The project expediter will have an additional responsibility of monitoring the project to ensure that the temporary utility fuels (electricity, water, steam, gas, etc.) are not misused or wasted such as unnecessary lights on, doors and windows open to heated or cooled spaces, water running in temporary toilets, etc.
5. The architect and owner shall consider extending the specified warranty period for permanent equipment and materials that are used in providing temporary utilities.
6. One possible structure that can be utilized is the establishment of an allowance.

End of JCR-36A

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JCR-37

Insurance

May 1977

October 1999

Recommendations:

The following should be included in the Supplementary General Conditions when the 1976 Edition of AIA Document A201 is used:

Under Article 11.4.1.4 in AIA Document A201, 1997, clarify the fact that "All Risk" insurance covers portions of the work that is stored off site and all portions in transit. Architects and contractors should be sure the Builders Risk Insurance is in place before any work is performed on the project.

End of JCR-37

This recommendation is the result of considerable discussion and deliberation by the Architect and General Contractor members of the Joint Cooperative Committee of AIA North Carolina and the Carolinas AGC. While its provisions are not binding on individual Architects or General Contractors, the committee believes that adherence to the recommendations will benefit the Owner and the Construction Industry in general.



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JCR-38

Four-Hour Bid Plan

May 1977

Voided October 1998



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JCR-39

Utility And Governmental Allowances and Fees

May 1977

April 1988, April 1990, October 1999

Recommendations:

When practical, and if needed, the specifications should include a bid allowance for water, natural gas, telephone, sewer, electrical taps, and underground electrical when the project requires fees to be paid.

Comments:

- A. Charges for water and sewer taps are extremely difficult to obtain from the regulatory agencies during the bidding period and the taps are frequently made on a cost plus basis.
- B. Be aware of acreage fees and water, sewer, and transportation fees; they should be paid by the owner directly.
- C. Architect should include above recommendations and comments A and B in Division One General Requirements and in applicable sections of the specifications.
- D. The architect should develop complete drawings and specifications for any and all roadway improvements required by the Department of Transportation or include an allowance for performance of this work.
- E. Investigate any possible import fees to be imposed by the county or municipality.
- F. Allowances: Bidders to verify if the allowance is for material or material and labor prior to bid.

End of JCR-39

This recommendation is the result of considerable discussion and deliberation by the Architect and General Contractor members of the Joint Cooperative Committee of AIA North Carolina and the Carolinas AGC. While its provisions are not binding on individual Architects or General Contractors, the committee believes that adherence to the recommendations will benefit the Owner and the Construction Industry in general.



JCR-40

Basis of Payment For Piling

May 1977

October 1999

Recommendations:

Division 2 of specifications should provide the following basis of payment for piling.

<u>Base Bid:</u>		\$ _____	Lump Sum
(Base bid includes mobilization and demobilization of equipment, base bid piling, pile load tests and penetration test piles.)			
Additional Pile Load Tests		\$ _____	Each
Additional Penetration Test Piles		\$ _____	Each
<u>Timber Piles:</u>			
Each Additional Pile		\$ _____	Per Pile
Each Pile Omitted		\$ _____	Per Pile
Piles Longer than Specified	Add	\$ _____	Per Linear Ft.
Piles Shorter than Specified	Deduct	\$ _____	Per Linear Ft.
Each Driving Boot in Place	Add	\$ _____	Per Boot
<u>Pipe Piles:</u>			
Each Additional Pile		\$ _____	Per Pile
Each Pile Omitted		\$ _____	Per Pile
Piles Longer than Specified	Add	\$ _____	Per Linear Ft.
Piles Shorter than Specified	Deduct	\$ _____	Per Linear Ft.
Pile Splices In-Place			
(Piles longer than bid)		\$ _____	Each
<u>Cast-in-Place Concrete Piles:</u>			
Each Additional Pile		\$ _____	Per Pile
Each Pile Omitted		\$ _____	Per Pile
Piles Longer than Specified	Add	\$ _____	Per Linear Ft.
Piles Shorter than Specified	Deduct	\$ _____	Per Linear Ft.
<u>Precast Concrete Piles:</u>			
Each Additional Pile		\$ _____	Per Pile
Each Pile Omitted		\$ _____	Per Pile
Piles Longer than Specified	Add	\$ _____	Per Linear Ft.
Piles Shorter than Specified	Deduct	\$ _____	Per Linear Ft.
<u>Structural Steel Piles:</u>			
Each Additional Pile		\$ _____	Per Pile
Each Pile Omitted		\$ _____	Per Pile
Each Pile Point in Place	Add	\$ _____	Per Point

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Piles Longer than Specified	Add	\$ _____	Per Linear Ft.
Piles Shorter than Specified	Deduct	\$ _____	Per Linear Ft.
Pile Splices In-Place (Piles longer than bid)		\$ _____	Each

End of JCR-40

This recommendation is the result of considerable discussion and deliberation by the Architect and General Contractor members of the Joint Cooperative Committee of AIA North Carolina and the Carolinas AGC. While its provisions are not binding on individual Architects or General Contractors, the committee believes that adherence to the recommendations will benefit the Owner and the Construction Industry in general.



JCR-41

Basis of Payment For Caissons

May 1977

October 1999

Recommendations:

Division 2 of specifications should provide the following basis of payment for caissons.

Base Bid \$ _____ Lump Sum
(Base Bid includes _____)
_____)

<u>Caisson Unit Prices</u>	<u>Add</u>	<u>Deduct</u>
----------------------------	------------	---------------

Shafts:

GREATER DEPTHS (not exceeding 10' below \$ _____ per cy \$ _____ per cy
bottom design elev.)

LESSER DEPTHS \$ _____ per cy

ADDITIONAL YARDAGE (for shafts exceeding \$ _____ per cy
design depth by 10' or more)

CAISSONS ADDED

INCREASE SHAFT DIAMETER \$ _____ per cy

(before caisson is excavated) \$ _____ per cy

Bells:

(Quote following units, only if bells are shown)

GREATER BELL VOLUME \$ _____ per cy

LESSER BELL VOLUME \$ _____ per cy
(Quote following units, only if **no** bells are shown)

BELLS ADDED \$ _____ per cy

2" Test Holes:

(Quote following units, only if test holes are called for)

TEST HOLES IN EXCESS OF THAT CALLED FOR \$ _____ per lf

TEST HOLES LESS THAN THAT CALLED FOR \$ _____ per lf
(Quote following units, only if no test holes are called for)

TEST HOLES ADDED \$ _____ per lf

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Rock Excavation:

(Quote following units, only if rock

excavation is included in the Base Bid)

GREATER OR LESSER ROCK EXCAVATION,

Drilling with rock augers

\$_____ per cy

Add or Deduct

GREATER OR LESSER ROCK EXCAVATION

\$_____ per cy

Other, Add or Deduct

(Quote following units, only if no rock

excavation is included in the Base Bid)

ROCK EXCAVATION, Drilling with Rock

augers

\$_____ per cy

ROCK EXCAVATION, Other

\$_____ per cy

REQUIRED STEEL

\$_____ per cy

Comments:

- A. The specifications should state the minimum weight requirements for the drilling machine, kelly bar and hydraulic crowd system that will be accepted on the project and extra compensation for rock excavation should not be approved, or paid, unless the work is performed with drilling equipment equal to or greater than specified.
- B. Rock should be defined as any material or obstruction that can't be drilled with the drilling equipment specified when equipped with a normal earth auger.
- C. Rock excavation volume should be paid for, at the unit prices quoted, as an extra cost over the Base Bid and other unit prices.
- D. The payment volume should be based on the design caisson shaft volume from the point of earth auger refusal, including any voids and softer materials that may be intermixed with obstructions to the depth that satisfactory bearing is reached or until the obstruction is cleared.

End of JCR-41

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JCR-42

Rock Excavation

May 1978

October 1999

Recommendations:

The specifications should provide the following unit price payment classifications for rock excavation when it is anticipated rock excavation will be encountered.

Rock excavation in trenches, drilling and blasting per cubic yard \$ _____.

Rock excavation in bulk, drilling and blasting per cubic yard \$ _____.

Rock excavation in bulk, tractor and ripper per cubic yard \$ _____.

Comments:

- A. Rock excavation consists of removal and disposal of materials that cannot be excavated without continuous and systematic drilling and blasting or continuous use of a ripper or other special equipment.
- B. Typical of materials classified as rock are boulders 1/2 cubic yard or more in volume, solid rock, rock in ledges, and rock-hard cementitious aggregate deposits.
- C. Intermittent drilling performed to increase production and not necessary to permit excavation of material encountered should not be considered rock excavation.
- D. The specifications should stipulate the basis for computing the payment quantities.

Note: In order to be equitable to both owner and contractor, the specifications written should establish such controls as deemed necessary to insure that unit prices are fair.

End of JCR-42

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JCR-43

Bid Submission And Opening Procedures

September 1979

November 1984, October 1999

Recommendations:

The following bid submission and opening procedures is the accepted standard and is recommended to be followed by architects receiving and opening bids. House Bill 1327 states that you must have 3 of whatever prime contractors are bidding. Senate Bill 308 applies to any project.

The Instructions to Bidders of Supplement thereto as bound with the specifications should contain the following bid submission information:

1. Bids shall be submitted in a two (2) envelope system. The name, address and license number as well as type of contract (General, Mechanical, Plumbing, Electrical, etc.) to be shown on the outside. On the inside of the outer envelope include the following:
 - a. Bid security, if required.
 - b. Certification of receipt of addenda. Written on contractor's letterhead.
 - c. Any special reference, financial statements, etc., required of the contractor.
 - d. Any modification of bid amount.
 - e. A sealed envelope containing the proposal and marked on outside, "PROPOSAL."
2. Bids shall be mailed or delivered to the owner or his representative at the place of and prior to the time for opening bids.

Opening procedures should be observed as follows:

1. All bid openings should be open to all interested parties.
2. Bid tabulation forms should be prepared in advance by the architect and provided to all interested parties attending the opening. Forms should contain the names of the prospective bidders and blank spaces for recording the bidder's license number, bid bond, base bid, calendar days for

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construction if not specified in the bidding documents and alternates. Space for unit prices should be provided only when they are to be used in determining the low bid.

3. Approximately five (5) minutes prior to the designated time for receiving bids, the architect should announce the "official time" that will be used in declaring the bidding closed.
4. At the designated time for receiving bids, the bidding should be declared closed and no bid accepted after the announced closing.
5. Modification of a bid should not be accepted unless it is received by the owner and/or his representatives at the place of and prior to the time for opening bids. Such modification should only be accepted when it is by telegram or in writing properly authorized by the bidder.
6. After the announced bid closing, the architect should proceed as follows:
 - a. If public money is involved, assure himself that he has at least three (3) bidders for each prime contract. Should he not have three, do not open bids on that portion of the work. Ask the bidders to hold their bids for a re-advertisement. Upon re-advertisement for bids, an award can be made if one (1) bid is received.
 - b. Announce the number of addenda issued for all trades, if any, and be prepared to read same if asked to do so.
 - c. Inquire if any bidder desires any clarification of the plans and specifications.
 - d. Inquire if any bidder desires to withdraw his bid. If so, he should be allowed to do so at this point.
 - e. Ask if anyone has any objections to proceeding, with the opening of the bids. If anyone objects to proceeding, the following alternatives are recommended:
 - Attempt to satisfy the objection.
 - Secure complete information as to the objection and proceed with either of the steps listed next.
 - Postpone the bid opening to a later date to allow sufficient time for the objection to be satisfied.
 - Rule the objection as informal and proceed with the opening of the bids.

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7. If open to the public, bids should be read aloud to the assembled group in the following order:
 - a. Name of bidder
 - b. License number of bidder
 - c. Open the envelope and verify to all assembled that proper bid security and other required certifications are enclosed with the bid. Read aloud any modifications to bid amount. If all of the required material is not with the bid, the "Proposal" should not be opened.
 - d. If all bidding conditions have been satisfied, open the envelope containing the "proposal" and read the base bid and alternate bids.
 - e. Read unit prices and construction time only if either or both are to be used in determining the low bidder.

Comments:

- A. Immediately following a bid opening that is open to all interested parties, the architect may furnish a tabulation of bids to the AGC office when requested.
- B. Under the provisions of GS 87-13, "Any architect or engineer who recommends to any project owner the award of a contract to anyone not properly licensed under this Article, shall be deemed guilty of a misdemeanor and shall for each such offense of which he is convicted be punished by a fine of not less than five hundred dollars (\$500.00) or imprisonment of three months, or both fine and imprisonment at the discretion of the court."
- C. If bids are not opened in the presence of the bidders or unless there is strong objection from the owner, a tabulation of all bids received should be furnished each bidder.
- D. Qualified bids are not acceptable.

End of JCR-43

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JCR-44

Shop Drawings & Product Data Submittals

April 1988

April 1989, Sept. 1989, April 1995, October 1995, October 1999, October 2001

Recommendations:

Architect shall review and approve or take other appropriate action upon the Contractor's submittals and shop drawings. Architect's action shall be taken with such reasonable promptness as to cause no delay in the work while allowing sufficient time to permit adequate review. Generally, fourteen (14) days should be adequate review time for properly submitted shop drawings. Faster turnaround on certain long-lead items should receive special consideration if requested by Contractor.

Comments:

- A. Contractor shall submit shop drawings timely in order not to place an undue burden on the Architect. Contractor shall indicate his approval of the shop drawings prior to their submission to the Architect.
- B. Contractor shall maintain a complete set of approved shop drawings on the job site.
- C. Items requiring finish selection may require more time and shall be grouped to allow the Architect to fully coordinate all color selections. Architect should identify such items or other items which need to be grouped.

Recommended Action:

Sample Stamp

____ Approved
____ Not Approved

____ Approved as Corrected
____ Revise and Resubmit

Review is only for conformance with the design concept of the project and compliance with the information given in the Contract Documents. Neither the Architect's review or approval shall relieve the Contractor of his obligations as required by the Contract Documents.

Architect and/or Engineer

Address

By _____ Date _____

End of JCR-44

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JCR-45

Separate Bid Proposals

September 1981

October 1999

Recommendations:

Architect should provide separate copies of the bid document forms with the bid package so that the contractor can keep the specifications in his possession on bid day and not submit with the bid documents.

End of JCR-45

This recommendation is the result of considerable discussion and deliberation by the Architect and General Contractor members of the Joint Cooperative Committee of AIA North Carolina and the Carolinas AGC. While its provisions are not binding on individual Architects or General Contractors, the committee believes that adherence to the recommendations will benefit the Owner and the Construction Industry in general.



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JCR-46

Pre-Bid Conference

May 1983

April 1988, October 1999

Recommendations:

On large or complex projects, a Pre-Bid Conference should be held in order for prospective bidders to receive information or to ask questions concerning the project. The conference should be held after prospective bidders have had time to review the plans and specifications, 10 to 14 days prior to bid and within reasonable time to permit the issuance of appropriate addenda 7 days prior to bid.

Comments:

A. The following Agenda outline should be the minimum covered for the meeting:

1. Opening meeting.
2. Reviewing of project.
3. Required plan for scheduling, coordinating and monitoring work under the project contract.
4. General requirements, bid package and bid opening procedures.
5. Questions and answers.
6. Close meeting.
7. Contractors given a tour of job site.

B. Also recommended:

1. List of attendees.
2. Invitation to owner.

C. If the project involves major renovation or repairs, then the conference should be held at the jobsite.

End of JCR-46

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JCR-47

Sample Mock-Up Room

May 1983

October 1999

Recommendations:

On projects which have a large number of similar rooms, such as hotels, a "mock-up" sample room should be provided as a guide for acceptable finishes.

Comments:

The purpose of the sample room is to help make clear what the architect considers acceptable quality. If possible, it should be located on the job site and when practical, be a final room.

End of JCR-47

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JCR-48

Unsuitable Material Allowances

April 1988

October 1999

Recommendations:

The specifications should provide for the handling of unsuitable soil and unit prices to govern when it's anticipated that unsuitable soil will be encountered.

The following is a suggested specification paragraph and unit price schedule to accomplish the task.

QUANTITY OF UNSUITABLE MATERIAL: The following quantity of undercut and removal of unsuitable material shall be included in the Base Bid and considered as part of the Contract as follows:

(A) ____ cubic yards – general earth excavation, machine

(B) ____ cubic yards – trench earth excavation, hand

The unit prices quoted on the Bid Form shall apply for adding to the above quantity in accordance with the method used. The unit prices quoted on the Bid Form shall also apply for deducting from the above quantity.

QUANTITY OF BACKFILL: The following quantity of backfill shall be included in the Base Bid and considered a part of the Contract as follows:

(A) Earth backfill, machine ____ cubic yards

(B) Earth backfill, hand ____ cubic yards

Unit Prices: Should the undersigned be required to perform work over and above that required by Contract Documents or should he be ordered to omit work required by Contract Documents, he will be paid extra or he shall credit the owner, as the case may be, on basis of unit prices quoted herein, prices quoted being sum total compensation payable or creditable for such items IN PLACE.

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<u>Material</u>	<u>Unit</u>	<u>Price-Add</u>	<u>Price-Deduct</u>
General Earth Excavation, Machine	Ea CY	\$ _____	\$ _____
Trench Excavation, Hand	Ea CY	\$ _____	\$ _____
Earth Backfill, Machine	Ea CY	\$ _____	\$ _____
Earth Backfill, Hand	Ea CY	\$ _____	\$ _____

Comments:

- A. Earth excavation cubic yard quantities, for all categories, shall be based on the volume of the excavated area and not the volume of the earth removed.
- B. Earth backfill cubic yard quantities, for all categories, shall be considered as compacted in place quantities based on the volume of the area to be filled.
- C. State whether or not unsuitable soil, as determined by the independent geotechnical laboratory in the field, shall be disposed of on or off the property. State also whether or not suitable fill material is available on-site or off-site. Adjust unit prices to fit the situation.
- D. It may be necessary to further define the unit prices to allow for the work to be done using various types of equipment which would alter production accomplished.
- E. If a large volume of unsuitable soil may be encountered, consider using quantity-defined unit prices (example: "0 – 100 CY"; "100 – 500 CY"; and "over 500 CY") in order that large quantities may be accomplished with smaller unit prices.
- F. Compaction of backfill should meet standards prescribed in these specifications.

End of JCR-48

This recommendation is the result of considerable discussion and deliberation by the Architect and General Contractor members of the Joint Cooperative Committee of AIA North Carolina and the Carolinas AGC. While its provisions are not binding on individual Architects or General Contractors, the committee believes that adherence to the recommendations will benefit the Owner and the Construction Industry in general.



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JCR-49

Liquidated Damages Clause

October 1988

October 1999

Recommendations:

1. Liquidated damages should be specified only when time is of the essence. Such a clause should never be used as a penalty to the contractor.
2. Special attention should be brought to the liquidated damages clause. A good time to do this would be at a pre-bid conference, at which time prospective bidders could acknowledge or challenge the proposed construction time frame.

Example:

"The contractor shall commence work to be performed under this agreement on a date to be specified in a written order from the designer and shall substantially complete all work hereunder *** calendar days.

For each day in excess of the above number of days, the contractor shall pay to the owner a sum of \$***** as liquidated damages reasonably estimated in advance to cover the losses to be incurred by the owner by reason of failure of said contractor to complete the work within the time specified, such time being in the essence of this contract and a material consideration thereof."

Comments:

1. See JCR-32 for additional information to be included in the Supplementary General Conditions or Special Conditions of the project.
2. The time frame must be realistic.
3. In case of multi-prime contract the architect and project expeditors shall arbitrate the responsibility of each prime contractor causing delay.
4. Where possible, contractors should be allowed to bid number of calendar days.

End of JCR-49

This recommendation is the result of considerable discussion and deliberation by the Architect and General Contractor members of the Joint Cooperative Committee of AIA North Carolina and the Carolinas AGC. While its provisions are not binding on individual Architects or General Contractors, the committee believes that adherence to the recommendations will benefit the Owner and the Construction Industry in general.



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JCR-50

Cutting And Patching

September 1989

October 1999

Recommendations:

In all cases, cutting and patching should be the financial responsibility of the trade contractor whose work required the cutting and patching. All patching shall be performed by qualified mechanics experienced in the specialty involved, to the standards of the project specifications.

Comments:

These recommendations should be noted on the PME drawing as well as in the supplemental conditions.

End of JCR-50

This recommendation is the result of considerable discussion and deliberation by the Architect and General Contractor members of the Joint Cooperative Committee of AIA North Carolina and the Carolinas AGC. While its provisions are not binding on individual Architects or General Contractors, the committee believes that adherence to the recommendations will benefit the Owner and the Construction Industry in general.



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JCR-51

Minority/Women/Disadvantaged Business Enterprises

April 1993

October 1999

Recommendations:

The following procedures are recommended when a MBE, WBE or M/W/DBE plan is part of the bidding process for a project. The procedures outlined below should help serve the interest of M/W/DBE participation and a competitive price for the owner.

1. If owners are required to have an M/W/DBE plan, the architect should encourage the owners to develop this plan. The plan should be done by the owner and the owner's attorney.
2. The M/W/DBE plan should be part of the bid documents.
3. The owner should provide a list of M/W/DBE contractors and suppliers with the bid documents. This list should not exclude other M/W/DBE bidders and the contractor should use other non-listed M/W/DBE prices with a mechanism for subsequent certification.
4. When the owner does not have an approved list of M/W/DBE contractors and suppliers, the plan should clearly outline the criteria for eligible contractors and suppliers.
5. The architect and the owner's representative should review the M/W/DBE plan and the requirements for documentation at a Pre-Bid Conference. Items covered in this review should include:
 - a. The amount of documentation necessary to show a good faith effort should be outlined clearly.
 - b. Documentation showing a good faith effort should be required within three business days after the submission of bids from the lowest bidder.
 - c. Any conditions under which a bid would be considered non-responsive should be outlined. No conditions should be written that could be construed to require contractors or awarding authorities to award contracts or subcontracts or to make purchases of materials or equipment from responsible M/W/DBE contractors or M/W/DBE subcontractors who do not submit the lowest responsive bid.

JCR-51

6. Contractors should provide M/W/DBEs with opportunities to submit subbids or material quotes on all parts of the project for which they are qualified to perform. Architects should work to make available to M/W/DBE's information that would allow them to submit subbids or material quotes on the project.
7. Owners should be encouraged, when possible, to use uniform M/W/DBE plans to have uniformity across the state. Carolinas AGC has developed a model plan.
8. When all bid and follow-up documentation is submitted, the architect should be available at the owner's request to review the M/W/DBE documentation.
9. Contractor or subcontractor should have bilingual personnel on site when needed for proper communication.

End of JCR-51

This recommendation is the result of considerable discussion and deliberation by the Architect and General Contractor members of the Joint Cooperative Committee of AIA North Carolina and the Carolinas AGC. While its provisions are not binding on individual Architects or General Contractors, the committee believes that adherence to the recommendations will benefit the Owner and the Construction Industry in general.



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JCR-52

Payment Bond

October 1994

October 1999

Recommendations:

On private projects in North Carolina, consideration should be given to modifying AIA Document A312, PAYMENT BOND, March 1987 Edition, by deleting Paragraph 4.2 in its entirety and by deleting the phrase "or with a subcontractor of the contractor" from Paragraph 15.1 in order to make payment bond consistent with North Carolina lien law.

Comments:

1. The above recommendation removes "third tier" protection from the Payment Bond.
2. The above recommendation is applicable only to private projects.
3. Those modifying AIA Document A312 are encouraged to consult with their professional advisor (attorney or bond specialist) with respect to completing or modifying the form.

End of JCR-52

This recommendation is the result of considerable discussion and deliberation by the Architect and General Contractor members of the Joint Cooperative Committee of AIA North Carolina and the Carolinas AGC. While its provisions are not binding on individual Architects or General Contractors, the committee believes that adherence to the recommendations will benefit the Owner and the Construction Industry in general.



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JCR-53

Hazardous Materials

April 1996

October 1999

Recommendations:

When an owner selects an architect or contractor for a project that includes the alteration, renovation or demolition of an existing structure, the following procedures are encouraged for the identification of hazardous materials:

1. The structure (or site) must be surveyed for hazardous potentials by a qualified individual or company. By definition, qualification means accreditation or certification (licensing) by a N.C. State Accreditation Agency. Substances (but not all inclusive) to be considered in the survey are: Asbestos containing materials, lead-based paint, underground fuel storage tanks, other containments and eventually interior "air quality control." Air quality survey determination will be similarly undertaken and monitored in the near future by mechanical engineering interests using existing standards of the American Society of Heating, Refrigeration and Air Conditioning Engineers.
2. The owner should be advised on how to undertake the survey process. The architect or contractor should be willing to assist the owner in this effort.
3. If the survey identifies hazardous materials, the owner should be advised by the architect or contractor on the owner's options for dealing with the problem (abatement or encapsulation, removal or abandoning the project, etc.).

Comments:

1. The architect or contractor should explain how the presence of hazardous materials may affect the development and progressing of the project, including safety to design and construction personnel, to the health and safety of the owner's staff as a result of the waste disposal process, etc.
2. If the contractor and the architect are selected at the same time, then both should be mutually involved in advising the owner of his/her responsibility.
3. The survey and the resulting report with specifics for continuing the project must be completed prior to progressing on demolition or construction. This JCR recommends that the survey report be completed prior to starting the design phase of the work.

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4. Although the building belongs to the owner and it's condition is the financial responsibility of the owner, it should be the initiative of the architect and contractor to request verification of the presence (or the lack thereof) of hazardous materials in the construction project prior to allowing exposure to either the designer or the contractor.

RESOURCE REFERENCE MATERIAL:

Each architectural office and each general contractor's office may wish to obtain a copy of the latest "Environmental Permit Directory" from the Department of Environment, Health and Natural Resources, c/o Office of Small Business Ombudsman, P.O. Box 29583, Raleigh, NC, 27626-0583 (phone: 919/733-1267). This reference provides names and addresses for pertinent control agencies at a cost of \$7.00.

An edited copy of the contents of the directory is listed as follows for information:

Air Quality – Air Quality Permit, Open Burning Permit

Facilities – Hazardous Waste Management Permits

Health – Asbestos Containing Material

Land Quality – Sedimentation Control Plan

End of JCR-53

This recommendation is the result of considerable discussion and deliberation by the Architect and General Contractor members of the Joint Cooperative Committee of AIA North Carolina and the Carolinas AGC. While its provisions are not binding on individual Architects or General Contractors, the committee believes that adherence to the recommendations will benefit the Owner and the Construction Industry in general.



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JCR-54

Project Expediter

October 1996

April 1997, October 1999

Recommendations:

State, county, municipal or other public bodies which do not use the state contract forms should be encouraged to use a project expeditor method for assigning responsibility for coordinating the work on multi-prime contracts.

The project expeditor should be the prime contractor with the largest amount of work (contract amount) or the most work on the critical path, or, as an option, may be the design professional.

The project expeditor shall be designated by the Designer in the Supplementary General Conditions. Responsibilities of the project expeditor shall be clearly stated in the Contract Documents.

Where state contract Forms are not used, the Contract Documents should reflect the language consistent with Article I (i) and Article 14 (f-1), Form OC 15 (May 1995), Instructions to Bidders and General Conditions of the Contract, State Construction Office, North Carolina Department of Administration.

Comments:

- A. The project expeditor does not have to be another entity in the construction process. The responsibility assumed, if the project expeditor is not a prime contractor on the project, is tremendous.

You must be certain that all prime contractors approve, in writing, the progress schedule and other key documents.

- B. The designer should designate the type of schedule in the Supplementary General Conditions. Whether you use a bar chart or network diagram type CPM, you must identify the critical path activities. Without that identification, it is impossible to sort out delay claims on multi-prime contracts.

Reference: Article 14 (f-1), Form OC15 (May 1995), Instructions to Bidders and General Conditions of the Contract, State Construction Office, North Carolina Department of Administration.

End of JCR-54

This recommendation is the result of considerable discussion and deliberation by the Architect and General Contractor members of the Joint Cooperative Committee of AIA North Carolina and the Carolinas AGC. While its provisions are not binding on individual Architects or General Contractors, the committee believes that adherence to the recommendations will benefit the Owner and the Construction Industry in general.



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JCR-55

Alternative Dispute Resolution (ADR)

October 1996

April 1997, October 1999

Recommendations:

In an effort to minimize the number of construction dispute claims going to the court system, it is recommended that the architect suggest to the owner the advantages of using ADR to settle all of the project disputes and request that he or she select one of the following options that is preferred. This preference shall be incorporated in the project specifications General and Supplemental Conditions.

OPTION #1

PARTNERING. The owner intends to encourage the foundation of a partnering relationship with the contractor and its subcontractors. This partnering relationship will be structured to draw on the strengths of each organization to identify and achieve reciprocal goals. The objectives are effective and efficient contract performance, intended to achieve completion within budget, on schedule, and in accordance with the plans and specifications.

This partnering relationship should involve all major parties and participation will be totally voluntary. Any cost associated with effectuating partnering will be agreed to by both parties and will be shared equally with no change in contract price. To implement this partnering initiative, it is anticipated that within 60 days of Notice to Proceed, the contractor's on-site project manager and the owner's on-site representative will attend a partnering development seminar.

This seminar will be followed by a team-building workshop to be attended by the contractor's key on-site staff and the owner's personnel. Follow-up workshops will be held periodically throughout the duration of the contract as agreed to by the contractor and owner.

If partnering fails to settle a dispute, then mediation shall be the next step toward a remedy.

MEDIATION. If a dispute arises out of or relates to this contract, or breach thereof, and if the dispute cannot be settled through direct discussions, the parties agree to first endeavor to settle under the American Arbitration Association's Construction Industry Mediation Rules before having recourse to binding arbitration.

If mediation fails to settle a dispute, the binding arbitration shall be the final remedy.

BINDING ARBITRATION. Any dispute, controversy or claim arising out of or relating to this contract, or breach thereof, shall be settled by arbitration

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administered by the American Arbitration Association under its Construction Industry Arbitration Rules, and judgement on the award rendered by the arbitrator(s) may be entered in any court having jurisdiction thereof.

OPTION #2

DISPUTE REVIEW BOARD. A Dispute Review Board (DRB) consists of three members selected and approved by both the contractor and the owner, who are experienced with the type of work involved, who are respected by their peers and who are neutral. They visit the job regularly during construction and are kept advised regarding progress. When disputes arise, the DRB is able to recommend settlement quickly, before adversarial attitudes can grow and harden.

The DRB's function is to hear disputes in an informal and communicative atmosphere and to provide recommendations for timely resolution. The DRB acts quickly to resolve disputes before the parties adopt rigid positions leading to adversarial relationships.

The DRB does not usurp the owner's authority to direct the work as provided in the contract. The role of the DBR is to provide an independent assessment on the merits of the dispute.

The critical element in the DRB process is selection of members who can be depended on to consider objectively all sides of the issue and to serve both parties equally and impartially.

Although the recommendations of the DRB are not binding on any party, the parties will thoroughly consider and place great significance on them and in most instances will accept the findings of an impartial, respected panel. Should such further proceedings as arbitration become necessary, the recommendations of the DRB are admissible as evidence.

These procedures shall apply whenever the parties to a construction contract have acted in accordance with the Dispute Review Board Procedures of the American Arbitration Association.

If the Dispute Review Board fails to settle a dispute, then mediation shall be the next step toward a remedy.

MEDIATION. If a dispute arises out of or relates to this contract, or breach thereof, and if the dispute cannot be settled through direct discussions, the parties agree to first endeavor to settle the dispute in an amicable manner by non-binding mediation administered by the American Arbitration Association under its Construction Industry Mediation Rules before having recourse to binding arbitration.

If mediation fails to settle a dispute, then binding arbitration shall be the final remedy.

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BINDING ARBITRATION. Any dispute, controversy or claim arising out of or relating to this contract, or breach thereof, shall be settled by arbitration administered by the American Arbitration Association under its Construction Industry Arbitration Rules, and judgment on the award rendered by the arbitrator/arbitrators may be entered in any court having jurisdiction thereof.

OPTION #3

MEDIATION. If a dispute arises out of or relates to this contract, or breach thereof, and if the dispute cannot be settled through direct discussions, the parties agree to first endeavor to settle the dispute in an amicable manner by non-binding mediation administered by the American Arbitration Association under its Construction Industry Mediation Rules before having recourse to binding arbitration.

If mediation fails to settle a dispute, then binding arbitration shall be the final remedy.

BINDING ARBITRATION. Any dispute, controversy or claim arising out of or relating to this contract, or breach thereof, shall be settled by arbitration administered by the American Arbitration Association under its Construction Industry Arbitration Rules, and judgment on the award rendered by the arbitrator/arbitrators may be entered in any court having jurisdiction thereof.

OPTION #4

EXPEDITED ADJUDICATION. If a dispute involves essentially a single issue of interpretation or fact, an Expedited Procedure will be employed, which is designed to be quick and inexpensive. This procedure is conducted according to special rules that are published by the Private Adjudication Center, Inc. Expedited Adjudication can be either binding or non-binding, depending on what the parties agree to.

MEDIATION. If a dispute arises out of or relates to this contract, or breach thereof, and if the dispute cannot be settled through direct discussions, the parties agree to first endeavor to settle the dispute in an amicable manner by non-binding mediation administered by the Private Adjudication Center through its Construction Industry Dispute Resolution Service before having recourse to binding arbitration.

If mediation fails to settle a dispute, then binding arbitration shall be the final remedy.

PRIVATE ADJUDICATION. Any dispute, controversy or claim arising out of or relating to this contract, or breach thereof, shall be settled by arbitration administered by the Private Adjudication Center, Inc., under its Construction Industry Dispute Resolution Service, and judgment on the award rendered by the private judge(s) will be binding on both parties.

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DOCUMENTS:

PARTNERING – Obtain from the Associated General Contractors of America

333 John Carlyle Street, Suite 200
Alexandria, Virginia 22314
AGC publication #1205

DISPUTE REVIEW BOARD – AAA Dispute Review Board Procedures

Obtain from the American Arbitration Association
428 East Fourth Street
Suite 300
Charlotte, NC 28202
704-347-0200

MEDIATION – AAA Construction Industry Arbitration Rules

Obtain from the American Arbitration Association
428 East Fourth Street
Suite 300
Charlotte, NC 28202
704-347-0200

BINDING ARBITRATION – AAA Construction Industry Arbitration Rules

Obtain from the American Arbitration Association
428 East Fourth Street
Suite 300
Charlotte, NC 28202
704-347-0200

PRIVATE ADJUDICATION – The Construction Industry Dispute Resolution Service

The Private Adjudication Center, Inc.
c/o Duke University School of Law
Durham, NC 27706
919-493-7770

End of JCR-55

This recommendation is the result of considerable discussion and deliberation by the Architect and General Contractor members of the Joint Cooperative Committee of AIA North Carolina and the Carolinas AGC. While its provisions are not binding on individual Architects or General Contractors, the committee believes that adherence to the recommendations will benefit the Owner and the Construction Industry in general.



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JCR-56

Contract Forms And Contract Modifications

October 1996

October 1999

Recommendations:

It is in the best interests of owners, architects and contractors to encourage the use of printed AIA and AGC contracts. Also, modifications should be few and special form contracts should be discouraged.

Comments:

- A. Legal publishers are selling books suggesting how lawyers may modify construction contracts. This distorts the contracts' meaning. This is more difficult when the modifications conflict with each other, as is often the case.
- B. AIA and AGC contracts have been used for years and have developed well-understood meaning through both usage and law.
- C. Executed contracts should be on original printed forms and not reproduced.
- D. Modifications should be discussed with an attorney in the event of any doubt.
- E. Contract forms and modifications should be included in or referenced in the bid documents.
- F. Architects and contractors should be careful to use only one family of printed contracts. AIA, AGC or some other acceptable family should be used in their entirety to include requests for payment, subcontracts, general conditions and all other interrelated contract forms.
- G. Highly modified contracts are difficult to understand, and more importantly, difficult to enforce. Highly modified contracts are confusing and reduce competition. This is not in the best interest of the owner.

End of JCR-56

This recommendation is the result of considerable discussion and deliberation by the Architect and General Contractor members of the Joint Cooperative Committee of AIA North Carolina and the Carolinas AGC. While its provisions are not binding on individual Architects or General Contractors, the committee believes that adherence to the recommendations will benefit the Owner and the Construction Industry in general.



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JCR-57

Trash And Hoisting

April 1998

October 1999

Recommendations:

The following should be included in the Supplementary General Conditions:

1. The project expediter is responsible for all costs involved in the providing of necessary dumpsters along with hauling and disposal of debris. Each prime contractor maintains the responsibility for collection and placement of waste generated by the contractor's trade as directed by the project expediter.
2. Each prime contractor is responsible for separation of trash and debris to allow for recyclable materials to be eliminated from general debris collection.
3. Each prime contractor would remain responsible for disposal of any environmentally hazardous materials included or created by the contractor's scope of work.
4. Where a materials elevator is specified for multi-story construction, the project expediter would be responsible for the cost of erection, maintenance and operation for all members of the construction team.
5. Specific, individual lifts of materials and equipment which exceed materials elevator capacity would be the responsibility of the contractor requiring the lift.

Comments:

If the architect is the project expediter, he or she will designate who is responsible for hauling and disposal.

End of JCR-57

This recommendation is the result of considerable discussion and deliberation by the Architect and General Contractor members of the Joint Cooperative Committee of AIA North Carolina and the Carolinas AGC. While its provisions are not binding on individual Architects or General Contractors, the committee believes that adherence to the recommendations will benefit the Owner and the Construction Industry in general.



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JCR-58

Owner-Contractor Agreements

October 1998

October 1999

Recommendations:

The two most prevalent Owner-Contractor Agreements being utilized today are AIA Document A101 and AIA Document 111.

AIA Document A101 is the Standard Form of Agreement Between Owner and Contractor where the basis of payment is a stipulated sum. Under this contract format, the drawings and specifications are completed and the contractor either bids or negotiates a lump sum agreement with the owner based on the information contained in those documents. In this contract format, the contractor takes the risk of completing all the work documented for the lump sum amount.

AIA Document A111 is the Standard Form of Agreement Between Owner and Contractor where the basis for payment is the cost of the work plus a fee with a negotiated guaranteed maximum price. This contract format allows the owner and contractor to reach an agreement prior to the completion of drawings and specifications.

There can be confusion with this contract methodology when a Guaranteed Maximum price is set on the project. The wording in the Guaranteed Maximum Price contract is that the sum of the cost of the work and the contractor's fee is guaranteed by the contractor not to exceed a certain amount. This is subject to additions and deductions by Change Orders as provided in the contract documents; however, further wording is confusing owners and architects alike. That further wording is "such maximum sum if referred to in the contract documents as the Guaranteed Maximum price. Costs which would cause the Guaranteed Maximum Price to be exceeded shall be paid by the contractor without reimbursement by the owner." With the additional wording, we are now seeing many owners looking to the contractor and, in some cases, the architect, to make payment on any cost overruns due to field changes, unforeseen work, incomplete work, permit revisions, etc.

Comments:

We would, therefore, provide the following guidelines for the project team wishing to utilize the A111 document.

1. Understand the term "Guaranteed Maximum Price." Expectations of what will and will not be included in the price should be reviewed in detail.

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2. Establish the "Guaranteed Maximum Price" at the latest date possible. The reliability of the price is directly related to the amount of information available at the time it is established.

When the owner wants to establish the "Guaranteed Maximum Price" early, it should be recommended that:

- a. Proportional contingencies be included in the price to account for drawing development and unknown situations. The contingencies should be higher if the "Guaranteed Maximum Price" is established in the schematic or design development phases of design;
 - b. Narratives, outline specifications and/or written information be utilized to help establish the "Guaranteed Maximum Price" when drawings and details have not progressed to the point where they can clearly define the scope;
 - c. The contractor provide detail lists of clarifications, assumptions and qualifications used to establish the "Guaranteed Maximum Price." Items on this list should be reviewed jointly by the owner and architect; and
 - d. The contractor and architect meet regularly to review the drawings as they are being developed. The intent is to exchange information on issues that will affect the "Guaranteed Maximum Price."
3. Understand the articles and provisions of the "Guaranteed Maximum Price" contract that relate to overhead and profit, costs to be reimbursed, costs not to be reimbursed, savings and payment.

End of JCR-58

This recommendation is the result of considerable discussion and deliberation by the Architect and General Contractor members of the Joint Cooperative Committee of AIA North Carolina and the Carolinas AGC. While its provisions are not binding on individual Architects or General Contractors, the committee believes that adherence to the recommendations will benefit the Owner and the Construction Industry in general.



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JCR-59

Recommendation for Receipt of Subbids

October 2001

Recommendations:

Subcontractors' quotes should be provided to contractors early enough that they might be properly evaluated and, once received, held in confidence.

Comments:

- A. Scope sheets showing the work to be included in a proposal should be provided to contractors at least 24 hours prior to bid time.
- B. Scope sheets should include the name, phone and fax numbers of the estimator.
- C. Price submitted by facsimile should be transmitted to the contractor a minimum of two hours prior to the bid time.
- D. Although discouraged, prices submitted by telephone should be received by the contractor a minimum of two hours prior to bid time.

Summary:

Bid forms are becoming more complex due to the request for unit prices, alternate prices, listing of subcontractors, listing of MBEs used, etc. This increases the time necessary for filling out the bid form with information that is not determined until all pricing is in and the final price is arrived upon. The more time a contractor has to evaluate their subcontractor's quotes, the better chance they have of providing the owner with a complete price free from errors.

End of JCR-59

This recommendation is the result of considerable discussion and deliberation by the Architect and General Contractor members of the Joint Cooperative Committee of AIA North Carolina and the Carolinas AGC. While its provisions are not binding on individual Architects or General Contractors, the committee believes that adherence to the recommendations will benefit the Owner and the Construction Industry in general.



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JCR-60

Coordination of Construction Documents

October 2000

Recommendations:

For a project to be properly coordinated, the architect, engineers, general contractor, subcontractors, and utility companies must all review the work together.

The following guidelines for coordination of construction documents are recommended.

1. The architect should coordinate the architectural drawings with the civil drawings, structural drawings, plumbing drawings, mechanical drawings, electrical drawings, and fire protection or other specialty drawings if they are issued as part of the design package.
2. Drawings should be properly coordinated prior to issuing drawings for bidding, negotiation, or construction.
3. The project drawings should be properly coordinated with the project manual (i.e. project specifications).
4. After drawings have been issued for construction, any revisions to the drawings should be properly flagged and bubbled noting all revisions in the title block.

Comments:

- A. If a contractor notes any coordination issues in the set of drawings being priced, these should be immediately brought to the attention of the architect for clarification.
- B. The contractor should make available to all subcontractors all drawings and specifications on the project for review.
- C. During the construction process, shop drawings should be properly coordinated prior to submittal of shop drawings to the architect.
- D. All public utility companies associated with the installation and/or extension of lines to a project site should receive a full set of drawings for review and coordination in the planning and/or pricing of their work.

End of JCR-60

This recommendation is the result of considerable discussion and deliberation by the Architect and General Contractor members of the Joint Cooperative Committee of AIA North Carolina and the Carolinas AGC. While its provisions are not binding on individual Architects or General Contractors, the committee believes that adherence to the recommendations will benefit the Owner and the Construction Industry in general.

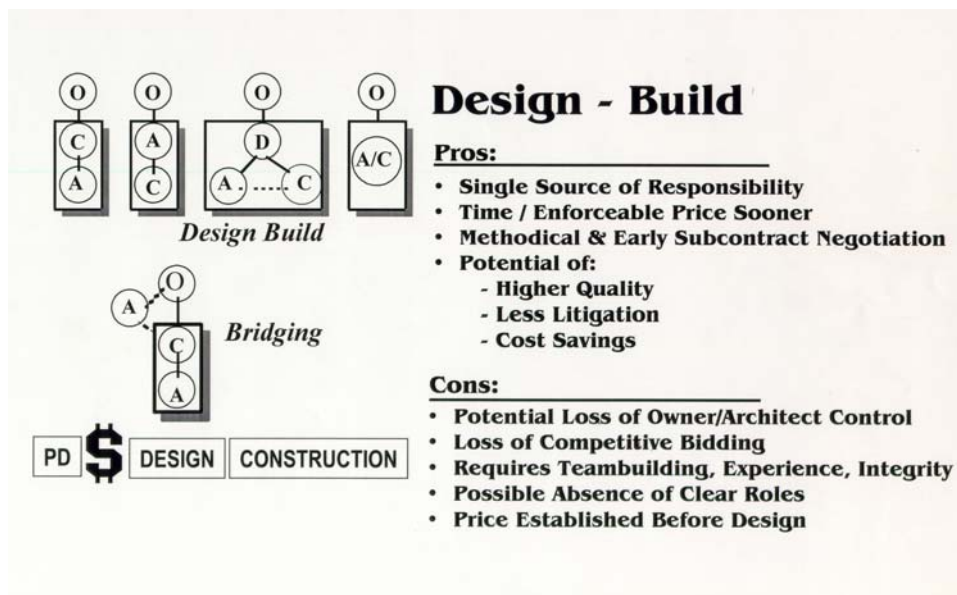


JCR-61

Design/Build Policy for Public Construction Work

October 2000

"Design-build" involves a project delivery method where one entity or team signs a single contract, accepting full responsibility for both the design and construction services of the building project. Modified design-build, or "Bridging," involves a two-phase process wherein an owner hires an architect to define the preliminary design and performance specification of a project and to serve as the owner's representative throughout the project. Following the development of specific design criteria for the project, the owner solicits proposals from design-build entities to execute the project.



In the private sector, an owner has the option of completing a project using any project delivery system it chooses; Design-bid-build, Negotiation (cost plus a fee or guaranteed maximum price contract), Construction Management, or Design-build. AIA North Carolina and Carolinas AGC continue to feel that the public owner can best provide a fair and full opportunity for open competition through the use of the Design-bid-build method.

However, we are aware of industry statistics that show an increasing portion of the private construction market is turning to design-build, seeking the potential benefits of single point responsibility, cost or time savings, and efficient coordination of design and construction services. The design-build project delivery system is now being used more often by federal agencies such as the Department of Defense, the General Services Administration, Department of Veterans Affairs, and Bureau of Prisons. A number of states, including Alaska, California, Florida, Illinois, Idaho, Minnesota, New Mexico, Texas, and Virginia have also enacted legislation expressly authorizing the use of design-build.

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The public owner, however, has the responsibility to secure construction services with methods that will provide a fair and full opportunity for open competition and to ensure that the public project is built at a competitive price to the taxpayer without risk in the performance of the contractor or favoritism. Licensed design professionals also have responsibilities to public health, safety and welfare that cannot be lessened or delegated in any way because of the involvement as part of a design-build entity. Under the North Carolina General Statutes, design-build on a public project is currently not permissible without special legislation.

AIA North Carolina and Carolinas AGC recognize that certain conditions may cause a public owner to consider construction services using an alternative delivery system such as design-build. When evaluating the suitability of the design-build delivery system for use on specific projects, the public owner must carefully consider:

1. time and cost constraints for delivery of the project;
2. the capability and experience of potential teams to respond to the owner's request for proposals (Requests for Proposals or RFP's);
3. the capability of the public owner to manage the project, including personnel to oversee the project who are familiar with the design-build delivery system;
4. the degree to which the owner or the public seek to participate in the design and approval of the project;
5. the functional, technical and aesthetic quality objectives established for the project; and
6. contractual issues involving liability and dispute resolution.

The Project Definition Phase

Because of its unique ability to combine the strengths of the design-bid-build project delivery system with those of design-build, AIA North Carolina and Carolinas AGC believe that public agencies considering design-build should employ the modified, two-phase process referred to as "Bridging."

In the first phase of this process, the public owner would select an architect or licensed design professional and execute a contract with them to prepare a "design criteria package" for the project. The primary purpose of the design criteria package is to define the project scope, including the preliminary design and performance specifications of the project. The package should also furnish interested design-build entities with sufficient information that will allow them to respond to the owner's RFP to complete the design, construction documents and construction phases of the project.

The design criteria package should specify performance-based criteria for the project, including, but not limited to:

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- Legal description of the site
- Survey information
- Site development requirements
- Provisions for utilities, storm water retention and disposal, and parking requirements
- Interior space requirements (space program)
- Quality and performance standards for materials and building systems
- Schematic layouts and conceptual design criteria
- Exterior elevations and building cross-sections
- Cost or budget estimates
- Design and construction schedules
- Objective evaluation criteria that will be used as the basis for selection
- Contract forms of agreement for the project

The Selection Phase

After the design criteria package is prepared and distributed as part of the Request for Proposals, the public owner should determine the minimum number of proposals that must be received and the selection criteria that will be used in their evaluation. A minimum of three to five responses from qualified teams is recommended if design-build is used. The owner should establish a selection panel that includes design and construction professionals familiar with the project and the design-build delivery system. The panel should also include representatives from the agency or public who will use the facility.

When a public agency employs the design-build method, selection of the design-build entity should involve qualifications-based selection procedures, which require comprehensive consideration of competence, capability and a negotiated price that is fair and reasonable to the public.

Upon receipt of proposals, the selection panel should select a minimum of three design/build teams to submit sealed competitive proposals. Public owners should consider providing a pre-announced stipend to all teams that are finalists for the project. Interviews should then be conducted between the owner and the three teams determined to be finalists in the selection process. Finalists should be provided an opportunity to make a formal presentation before the public owner's agents. The combination of time and cost to complete the project should constitute the major criteria for the final selection process.

To ensure fairness in the process, all qualified design/build teams must be afforded a reasonable and equal time to prepare and present their proposals. To avoid unfair advantage, no person or entity involved in the development of the RFP or design criteria package should be allowed to participate as a member of a design-build team submitting a proposal.

Conclusion

AIA North Carolina and Carolinas AGC believe that these guidelines will improve the contractor selection process for public agencies who consider using an alternative

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project delivery system such as design-build. When implemented, these guidelines will benefit public owners, design professionals and the construction community by bringing uniformity and consistency to the design-build process in the public sector.

End of JCR-61

This recommendation is the result of considerable discussion and deliberation by the Architect and General Contractor members of the Joint Cooperative Committee of AIA North Carolina and the Carolinas AGC. While its provisions are not binding on individual Architects or General Contractors, the committee believes that adherence to the recommendations will benefit the Owner and the Construction Industry in general.



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Sub-Bidder Prequalification, Workforce Adequacy/Training for Private Work October 2008

Recommendations:

In an effort to obtain the quality of craftsmanship and ultimate building value represented by the owners' investment, the architect and general contractor should promote the utilization of trade contractors who can demonstrate an adequate workforce commensurate with the level of challenge reflected in the design of the facility. Recommended methods by which this can be determined include:

- A. Workforce skill levels within recognized trades (concrete construction, steel framing, glazing, electrical, plumbing, HVAC and others) as verified through certifiable training and assessment programs.
- B. A corporate policy stating the company's commitment to craft training and a consistent history of internal initiatives to recruit, employ and train craft workers, including upgrade programs such as utilizing new technology, special skills and job site safety.
- c. The architect and general contractor should encourage the owner to weigh the value of each subcontractor's training activities using the following criteria:
 - a. A structured craft training program
 - b. Subcontractor's verified journeymen-to-trainee's ratio within the craft or trade at question
 - c. Employee orientation/safety training.
 - d. Corporate personnel with training responsibility.
 - e. A corporate policy stating the company's commitment to craft training and a consistent history of internal initiatives to employ and train craft workers

Absent of this recommended value application by the architect and general contractor responsible for the outcome of the workmanship, the owner has no tangible means of weighing a superior workforce value in selecting the respective trade contractors or subcontractors.

End of JCR-62

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AIA North Carolina

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General Contractor Prequalification, Workforce Adequacy/Training for Public and Private Work

July 2010

Recommendations:

In an effort to obtain the quality of craftsmanship and ultimate building value represented by the owner's investment, the architect should promote the utilization of general contractor's who maintain training programs for their staff and who utilize trade contractors who can demonstrate an adequate workforce commensurate with the level of challenge reflected in the design of the facility. Recommended methods by which this can be determined include:

- A. Review the General Contractor's commitment to an education and training program for management and supervisory personnel. These programs should include scheduling, safety, quality control, environmental issues and craft supervision as well as other related topics. Programs can be developed in house or through providers such as the Department of Labor, the Community College System, NCCER, the CAGC and private groups such as Falls Management Institute.
- B. If the General Contractor has in house craft personnel within recognized trades (i.e., steel framing, concrete construction, masonry construction, glazing, drywall, carpentry, mechanical, electrical, plumbing, and interior finishes), training programs should be established for each trade group. If the General Contractor does not have in house trades, then they should demonstrate utilization of subcontractors that have documented craft and supervisory education and training programs.
- C. Education and training programs should set goals for trainee expectations, curriculum content, delivery methods and certification levels through testing.

End of JCR-63

This recommendation is the result of considerable discussion and deliberation by the Architect and General Contractor members of the Joint Cooperative Committee of AIA North Carolina and the Carolinas AGC. While its provisions are not binding on individual Architects or General Contractors, the committee believes that adherence to the recommendations will benefit the Owner and the Construction Industry in general.