

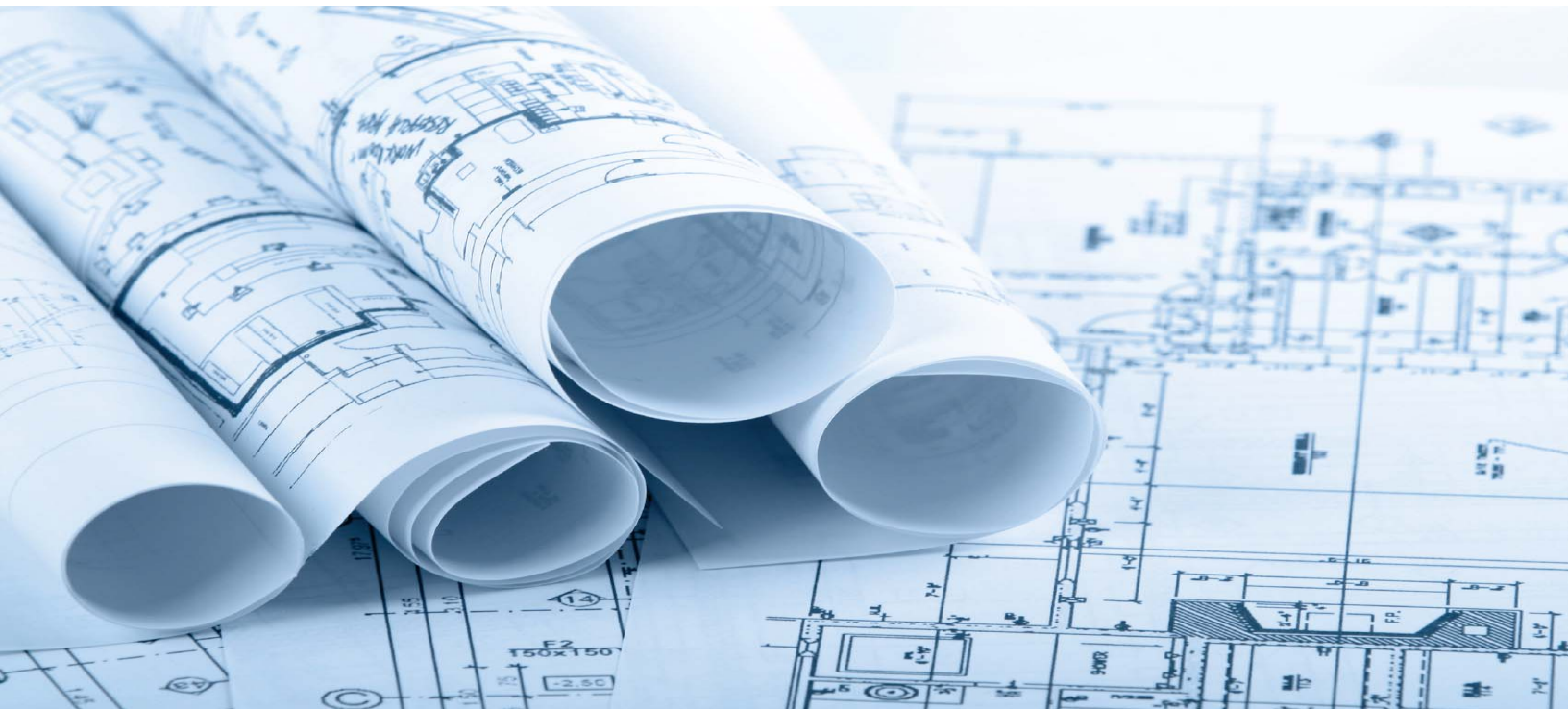
The Blue Book

Procedural Recommendations for The Maine Building Industry

*Jointly Recommended By
The Maine Chapters Of*



Advancement
of Construction
Technology



FOREWORD

The information contained in this guide is offered as an industry recommendation only. It is also recognized that the items and recommendations listed in this document may not fit or conform to every project's circumstances or procedures. This document was not written as, nor was it intended to be, an attachment to a legal contract or agreement; it contains a series of recommendations and guidelines. The application of any or all of those to a specific contract or agreement must recognize the scope of services/scheduling/cost implications as they relate to the specific contract or agreement, as some items have financial implications.

It has been prepared for adoption by the Joint Committee of the American Institute of Architects – Maine Chapter (AIA Maine), Associated General Contractors of Maine (AGC Maine), the Maine Chapter of the Construction Specifications Institute (CSI), Associated Builders & Contractors of Maine (ABC), American Council of Engineering Companies of Maine (ACEC) - Maine, and the Maine Chapter of the American Society of Professional Estimators (ASPE).

This guide is intended to establish a spirit of understanding and cooperation among the various organizations of the Maine Construction industry which is essential towards the attainment of desirable objective in the bidding procedure and in award of contracts. The sponsors of this document do not intend for this document to include all items in bidding procedures, rather, the subjects are areas that should be noted and addressed accordingly.

REFERENCES AND CREDIT

Many of the guidelines contained herein were taken from the so-called "Articles Generally Agreed To" which were developed jointly by AIA and AGC in 1968 and amended in 1972. This guide was originally developed in 1978 through the efforts of and with the approval of AIA, AGC and CSI, and updated in 1995, using material from the ASPE Document "Recommended Bidding Procedures for Competitively Bid Construction Projects." It was again updated in 2009 with special attention to changes resulting from the 2004 edition of MasterFormat.

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SECTION ONE – BIDDING PROCEDURES

1. PERMITS

- a. Designer's Procedure: Submit bidding documents to the appropriate governing authority, or the Building Inspector for review, no later than advertised date of bids, and obtain the preliminary assurance that a permit will be issued when an application is made.
- b. The owner should obtain all necessary environmental and municipal approvals prior to the time of bid.
- c. Responsibility of procuring and paying the building permit cost should be clearly stated in the project manual.

2. OWNER'S PROOF OF FINANCIAL ABILITY

- a. At the time of the award of contract and throughout the project, the Owner should be prepared to furnish satisfactory evidence that funds are available to pay the full contract amount.
- b. Private owners, governmental bodies and institutions should place a statement in the Invitation for Bids stating funds are presently on deposit for the project, or that funds have been approved for the project.

3. PLAN ROOMS AND ADVERTISING

- a. Plans and specifications for projects being bid should be submitted to as many plan rooms as possible. The following plan rooms are available:

McGraw-Hill Construction/F. W.
Dodge Corp.
224 Gorham Road
Scarborough, Maine 04074

Associated General Contractors of Maine
188 Whitten Road
P. O. Box 5519
Augusta, ME 04332-5519

Willis HRH Northern New England
31 Court Street
Auburn, ME 04210

Willis HRH Northern
260 Harlow Street
Bangor, ME 04402

Cross Insurance
P. O. Box 1388
74 Gilman Road
Bangor, ME 04401

Construction Summary of
Maine
734 Chestnut Street
Manchester, NH 03104

- a. Bid scheduling for all projects being bid through the Maine Construction Bid Depository: Designers should clear the bid opening date with the Depository prior to setting a schedule bid opening. For all other projects, reference will be made to the weekly Bid Calendar published by the Associated General Contractors of Maine to avoid conflict of bid opening dates.
- b. Advertisements should be circulated sufficiently in advance of the distribution of bidding documents to allow prospective bidders to include the project in their respective bid calendars. The minimum advance notice should be 10 days prior to bid document issue. Multi-million dollar projects may require up to 30 days advance notice.

- c. Advertisements should contain a short description of the project including a bid date, availability of funds, time, project location, licensing or certification requirements, and bid, performance and payment bond requirements.
- d. Advertisements should state date of document availability, location to obtain documents, and deposit and refund provisions.

4. BIDDERS

- a. Public owners are required by law to accept bids from any bidder who meet the criteria set forth in the bidding documents. Public owners may pre-qualify in accordance with Maine Statute. Where prequalification has been used, the list of pre-qualified firms should be reported to the industry prior to the advertisement for proposals.
- b. A private owner may pre-qualify bidders following a process which enables the owner to gather necessary information from and about prospective bidders prior to the issuing of bid documents.
- c. Both the designer and owner should participate in the selection of invited bidders.
- d. The number of invited bidders selected should be limited. The number should ensure an adequate number of bidders and competition.
- e. While negotiating a contract and prior to bidding, public and private Owners should be aware if the General Contractor has in existence any signatory agreements, or other restrictions that might arise from such agreements that may limit competition among sub-bidders

5. ISSUANCE OF BIDDING DOCUMENTS

- a. All bidding documents should be completed before issuing them for bid.
- b. At least one complete set of bidding documents should be provided to each general bidder. Sub-bidders should be provided with one complete set. Bidders wishing additional sets should be required to pay printing costs. Reduced size drawings should be discouraged.
- c. Deposits may be required at designer's discretion, and returned only to bidders returning documents in good condition.
- d. A plan holder who decides against bidding and notifies the Owner or Designer 72 hours prior to bid and who returns his or her bid documents in good condition should have his or her deposit fully refunded. Deposits should be refunded upon return of all drawings. Mailings and handling charges may be identified separately.
- e. The apparent low bidder and other bidders whose bid security is retained by the awarding authority should be allowed to retain bid documents until the contract has been awarded. If other bidding documents are returned to the Owner or Designer with ten (10) days after the bid, in good condition, their deposit should be refunded.
- f. The deposit amount should closely approximate reproduction costs of plans and specifications.
- g. If a plan deposit system is not used, bid documents should be available for purchase at the cost of reproduction and handling.
- h. The successful prime and subcontractor bidder's deposit should be returned.
- i. The distribution of documents by electronic media is encouraged. This will reduce the cost to the bidder for plan sets and allow them to print them or further distribute at their convenience. The cost for such sets should only be a nominal amount for maintaining the bidders list and coordination of the RFI's and addenda. Distribution may be through Architect's FTP Sites, owner's web sites or through governmental agencies

6. INTERPRETATIONS AND ADDENDA

- a. Questions should be submitted in writing to the designer.

- b. All answers should be transmitted by written addendum to all plan holders.
- c. If an addendum cannot be received 72 hours prior to bid opening, the bid date should be extended.
- d. All addenda should be in writing.
- e. All addenda changes to drawings should be clearly identified, either by “clouding” or by issuing supplemental drawings.

7. SUBMISSION OF BIDS

- a. Bids should be received at a specific time between 2:00 pm and 4:00 pm on Tuesday, Wednesday, or Thursday.
- b. Bids should not be received on holidays, on the day before or after holidays, nor during the week between Christmas and New Years.

8. BIDDING PERIOD

- a. Allow three weeks minimum preparation for small (under \$1,000,000) or simple projects.
- b. Allow 4-6 weeks for large and/or complex projects.
- c. For extremely large projects (\$50,000,000 or more), extremely complex projects, or extremely complex bid requirements, the estimating time allowed should be determined after consultation with several potential prime bidders.

9. BID OPENING

- a. The time of receipt should be clearly stated and strictly enforced
- a. Bids should be publicly opened and read aloud. Obvious irregularities in a bid (e.g., no bid bond, or failure to acknowledge addenda, failure to comply with listing requirements, etc. should be noted)
- b. Other pertinent bid information (alternates, subcontract listing, etc.) should also be read aloud.
- c. Interested parties should be allowed to review the bidding documents of all bidders at an appropriate time after the bid date.
- d. The schedule for award should be announced. Bids should not be held longer than thirty (30) days without an award announcement being made.
- e. Complete bid results should be published in a timely manner and sent by mail to all bidders.
- f. Bids will be accepted until time stated on the advertisement or as amended by addenda. Bids not received by the specific time should be rejected and returned unopened.
- g. Assure opening of bids at a specified time before all bidders who wish to be present. If bidders are not allowed to be present during the opening furnish all bidders copies of the bid results.

10. STANDARD BID FORM

- a. Blank bid form should be prepared for each project with copies bound into each volume of the project manual. The designer may furnish extra copies to each bidder for use in preparing the bid, if requested.
- b. If bid bonds are required, the bidder should be permitted to secure such bond from surety companies of their own choosing, provide such companies are authorized to do business in Maine.
- c. Bid forms should be as simple as possible, with the minimum pertinent information included at bid time.

- d. Unit prices should be kept to a minimum.
- e. The bidding documents may include a requirement for the listing of the major subcontractors proposed to be used by the bidder. This listing should be limited to major subcontract trades and should list only the name of the proposed subcontract firm unless the Maine Construction Bid Depository System is used. When this system is used, Bid Forms must comply with the requirements of the Maine Construction Bid Depository system (See Section 14).
- f. Cashier's check should not be permitted or substituted in lieu of bid bond.

11. USE OF ALTERNATES

- a. Keep alternates to a minimum. Request alternates only when of special importance to the owners, as a mean of (1) ensuring a proposal within a limited budget, or (2) providing an opportunity to make an important determination in the selection of material or processes. Avoid complex alternates requiring cost evaluation by a number of trades.
- b. Acting on the designer's recommendations, the owner should select alternates that best serve project completion in line with use of available funds. Where possible, work under an Alternate should be limited to a single trade. Alternate selections should not be manipulated to favor any one bidder over another. Where practicable, priority of alternates should be listed.
- c. Alternates should be clearly defined in both plans and specifications.
- d. Voluntary alternates should not be allowed at bid time.

12. UNIT PRICES

- a. Unit prices (except for work which cannot be reasonably quantified, e.g. piling, caissons and rock and associated earthwork) should not be included in the bidding documents. Other unit prices needed should be negotiated with the contractor.
- b. Separate unit prices should be required for additional work and for deleted work.
- c. The amount of unit prices should not be specified in the bidding document.

13. BIDS

- a. Bids that do not conform to the standard form of proposal, or are not filled out correctly and are unclear in intent should be rejected. Criteria for bid rejection should be clearly noted in the bidding documents.
- b. If, after bids are opened, the low prime bidder claims it has made an appreciable error in the preparation of its bid and can support such claim with evidence satisfactory to the owner and the Designer, it the bidder should be permitted to withdraw its bid, without forfeiting its bid security. A prime bidder claiming an error should not be permitted to alter its bid after the bids have been opened. The provisions for filing a claim of error should be clearly set out in the bidding documents.
- c. When the low prime bidder has been permitted to withdraw its bid, it the bidder should be disqualified from again bidding on the project in the event re-bids are requested.
- d. A bid may be returned upon request from the prime bidder provided the time for bid receipt has not passed. The owner should return such bids only upon request of an authorized agent of the prime bidder.
- e. If the lowest bid does not exceed available funds by more than fifteen percent (15%), an attempt should be made to renegotiate cost reductions with only the apparent lowest prime bidder. The prime bidder should, in turn, negotiate cost reductions with its legitimate low subcontractors and material suppliers.

- f. If the lowest bid exceeds the estimated or budgeted funds by more than fifteen (15%) and cost reducing items are not easily identifiable, then re-bidding should be considered.
- g. When making the determination of whether to re-bid or to negotiate, the parties should consider construction cost escalation, further delay in completion date, and the cost and time of the design professional, prime bidder, and subcontractor and material suppliers to re-bid the project.
- h. As a general rule, three (3) months should be the minimum time between the initial and subsequent bidding unless the project is re-designed.

14. USE OF FILED SUB-BIDS

- a. The use of filed sub-bid projects should be limited to those projects in excess of \$1,000,000. File sub-bids should be used for sub-bids in excess of \$100,000 or 7% of the total construction cost. File sub-bids should be restricted to commonly-accepted bid packages.
- b. Each filed sub-bid should be clearly described by one or more complete Project Manual sections and defined by both section number and section name as contained in the project manual.
- c. Filed sub-bids should be received at least six days in advance of the closing date for general contractor bid closing date.

SECTION TWO – PROJECT DOCUMENTS REQUIREMENTS

1. APPLICATION DOCUMENTS

- a. Bidding documents normally consist of:
 - 1). Drawings
 - 2). Project Manual: (See 2004 MasterFormat for numbering of Divisions and Sections)
 - i). Bid invitation or advertisement
 - ii). Instructions for Procurement
 - iii). Available Information
 - iv). Procurement Forms
 - v). Contracting Forms and Supplements
 - vi). Project Forms
 - vii). Conditions of the Contract
 - 1). General Conditions (Standard Documents)
 - 2). Supplementary Conditions
 - viii). Revisions, Clarifications and Modifications
 - ix). Specifications (Divisions 01 through 49)
 - 3). Any pertinent investigations and reports should be supplied to all bidders as a part of Available Information.
 - 4). Contract Documents normally consist of:

- i). Drawings
- ii). Project Manual (excluding bid invitation or advertisement, Instructions for Procurement, Available Information and Procurement Forms)
- iii). Revisions, Clarifications and Modifications
- iv). Executed Agreement
- v). Change Orders
- vi). Executed Bonds

2. FORMAT

- a. The Project Manual should be indexed by divisions and sections, conforming with the 2004 MASTERFORMAT, as adopted and issued by CSI.
- b. The Project Manual Table of Contents should include Title and Number of all Divisions with N/A for Divisions not used for specific project.

3. DRAWING REQUIREMENTS

- a. The drawings must be clear, complete, accurate and adequately dimensioned and should be a sufficient scale for estimating purposes.
- b. Responsibility – It is the designer’s responsibility to prepare documents that are in accordance with the prevailing codes. Statements such as “If drawings and specifications are not in accord with the building code, the required changes will be made at no additional cost” should not appear in contract documents.
- c. Standardization – Drawing should be organized in accord with the National CAD Standard (NCS) as developed by CSI and AIA. In indicating materials and their use, employ nationally accepted standard symbols and abbreviations. Where abbreviations are used on drawings, the explanation of the abbreviations should also appear on the drawings.
- d. Plot Plan and Survey
 - 1). A plot plan should be furnished to bidders from information showing locations of site, property lines, survey of site, base angles, bench marks, existing utilities, structures, location of soil borings, trees, etc. Existing topographical conditions should be shown. A dated copy of sub-surface investigation report should be provided to bidders.
 - 2). The building location should be accurately and clearly identified on the site plan.
- e. Scale
 - 1). Bidding documents should not include reduced drawings.
 - 2). Construction sections and large scale details sufficient for the purpose of correlating all parts of the work should be a part of the working drawings. This is particularly important when the size of the project makes necessary the preparation of the working drawings at a scale less than 1/8" = 1'- 0"
- b. Foundations and Footing Data
 - 1). Adequate soil investigations should be made at the project site to determine accurate subsurface conditions prior to the design and preparations of foundation and footing drawings so that footings can be shown at their proper elevations to avoid major foundation revisions during construction.
- c. Structural – Mechanical – Electrical
 - 1). For clear indication, structural, mechanical and electrical work should be shown on separate drawings with special attention to the more intricate details.

- 2). A lintel schedule should be shown on the drawings.
- 3). All pipe sizes should include measurement standards, IPS, ID or OD whenever any opportunity for confusion exists.
- 4). All structural, mechanical and electrical drawings should be coordinated with architectural drawings.
- 5). All structural design (live and dead) loads should be noted on the structural drawings.
- d. Revisions –Prior to the issuance of construction drawings, the designer should revise the original drawings to show all changes made by Addendum, clearly identifying each change including a reference to the specific Addenda for each change and the Title Block should be revised to indicate it has been changed and the changes that have been made. Following the revisions new prints should be issued for each set in circulation.
- e. Penetrations through exterior walls should be shown on architectural plans.
- f. Additions to Existing Buildings – Plans and specifications for additions and alterations to existing buildings should be more specific and detailed than merely stating “trim, etc. to match existing.” It is recommended that Existing Condition Plans be included in the bidding document under Available Information.
- g. Room Finish Schedule –Schedule should indicate where each material is used and include material legend.
- h. Door schedule should include hardware requirements.

4. SPECIFICATIONS REQUIREMENTS

- a. Responsibility – The specifications should not include any statement which would require that the contractor be responsible for the structural design of the building. However, in instances, the contractor may be responsible for the design of certain components or as assemblies.
- b. The use of such clauses or phrases as “intended”, “implied”, “assumed”, or as directed”, should be avoided from the specifications.
- c. Work Included – Each section of the specifications should begin with a paragraph entitled “Section Includes” which should itemize what is covered in that section. The next paragraph should itemize those references in that section
- d. Interlocking Trades – For filed bids, the specifications should include a statement delineating the areas of responsibility within which interlocking trades perform. For example, the heating specification and the electrical specification in the control wiring. Final coordination should be the responsibility of the general contractor.
- e. Approved Equals – Whenever possible, at least three trade or manufacturer’s names should be listed

5. SHOP DRAWINGS

- a. Items requiring shop drawings should be so designated.
- b. The contractor should review and approve for submittal all shop drawing and submit same with reasonable promptness (within 7 days following receipt) and the architect should return the drawings within 14 days following receipt and in such sequence as to cause no delay in the work.

6. SUBCONTRACTORS’ CONTRACTS

- a. Contractor should provide list of subcontractors to designer within thirty (30) days from date of contract,

- b. Contractor should award contracts to subcontractors within thirty (30) days of being awarded the general contract.
- c. Agreement Form – The Contractor/Subcontractor Agreement Form should be the standard form as prepared by a recognized professional trade organization.

7. CONTRACT CONDITIONS

a. Substantial Completion

- 1). The date of substantial completion should be the date upon which the project is available for use by its owner for the purpose its construction was intended. A substantial completion certificate should be required and it should signed by the contractor, designer, and owner.
- 2). All money due to the contractor, including retainage, as of the date of substantial completion should be immediately released to the contractor, less an amount reasonably required to finish any remaining punch list work.
- 3). The effective dates of all warranties should be the same as the date of substantial completion of the project or designated portion thereof.
- 4). Punch list items and the schedule for their completion should be clearly identified and full described. Multiple punch lists should be avoided. Upon verification of completion of punch list items, all remaining funds for the project should be immediately released to the contractor.
- 5). The owner should not be allowed to occupy the building before Substantial Completion. In the event that occupancy of the whole or part of a building is necessary before Completion, the contractor and the designer should make an inspection of that portion to be occupied and provide the designer a list of items that remain to be done for acceptance. At this time there should also be an agreement between the owner and the contractor with respect to the cost of utilities, heat, and insurance for the occupied portion.
- 6). As a Condition of the Contract, the contractor agrees to correct any work found to be not in accordance with the contract documents during a 1-year period following substantial completion or 1 year after the work was completed, for work not completed before substantial completion. The requirements for actions under this condition should conform to the provisions of the 1997 edition of AIA A-201 Article 12.2.2.

b. Final Completion

- 1). The date the designer finds the work acceptable under the Contract Documents and that the Contract has been fully performed and issues the certificate of Final Completion.

c. Retainage

- 1). If retainage is used, funds should be retained only on a line item basis at a rate no higher than 10 percent.
- 2). The retained percentage held on subcontractors should be the same rate as the owner is retaining from the prime bidder.
- 3). On phased construction, retainage should be released as each phase is completed.
- 4). Whenever practical, retainage should be released on those items of work that are substantially completed and accepted.
- 5). Division 01 should include requirements for partial release of retainage.
- 6). Retainage should apply only to materials and equipment provided and services actually performed in connection with the construction project. In no instance should retention or retention escrow accounts be misused in the event of a dispute, to provide coverage for damages or third-party liability anticipated or resulting from the dispute. It is the function of a

performance bond, insurance, warranties, or legal action to provide for contingencies of this nature.

d. Final Payment

- 1). Final payment should be made within thirty (30) days from the issuance of a certificate of final completion by the designer, provided a Release of Liens is received from the contractor, subcontractors and material suppliers. The contractor notifies the architect when he considers the job is completed to the best of his ability and in accordance with contract documents, so that the designer may inspect the work. The certificate should be issued after all incomplete or unacceptable items have been completed in accordance with the contract documents and all other terms of the agreement have been met.

e. Payment to Subcontractors

- 1). The general contractor should be required to furnish a certificate with his requisition stating the subcontractors and material supplies have been paid for their last monthly requisition except as noted.
- 2). Subcontractors should be paid in full, including retainage, when their subcontract is complete and their work is accepted by the Designer.

f. Schedule

- 1). If there are specification requirements for the schedule of work, they should be included in the appropriate Division 01 section of the Project Manual.

8. GENERALLY-ACCEPTED PRACTICES BY SPECIFIC DIVISION

a. Division 01 Requirements (NOTE: Division 01 requirements pertain to all other Divisions)

- 1). Change Orders - The issuance of change orders should conform with Article 7 of the AIA-201 General Conditions, 1997 Edition, and Article 10 of the EJCDC standard general conditions of the construction contract which indicates in part: That no extra work or change shall be made unless in pursuance of a written order from the designer stating that the owner has authorized the extra work or change. When the designer knows that there will be a change made but does not have the details, he should issue a "Construction Change Directive", followed up with the specific details within ten (10) days.
- 2). Substitutions - Requests for substitutions should only be made prior to receipt of bids and approved by addenda. The procedure for submitting a substitution request should be defined in Division 01.
- 3). Payment Procedures – Division 01 should include requirement for partial release of retainage" following Substantial Completion. It is suggested that the amount withheld for incomplete or unacceptable work be established at 150% of the expected cost to complete.
- 4). Allowances
 - i). The use of allowances should be avoided whenever possible.
 - ii). All allowances should be grouped in a separate section titled "Allowances". Clearly cross reference allowances, intended for inclusion in subcontracts, in the section of the specifications pertaining to the work covered by such allowances. Set forth requirements establishing precisely what the allowances include and do not include.
 - iii). The cost of the hook-up to the public utility should be shown as an Allowance unless it is to be paid directly by the owner.

- iv). Testing services or special inspections that are to be provided by contractor should be shown as an Allowance in Procurement Documents.
 - v). The allowance difference should be documented by change order(s).
- 5). Temporary Heat and Ventilation - The general contractor provides all temporary heat and ventilation requirements as follows:
- i). Additions to Existing Facilities – Where existing central heating facilities are available and the permanent heating system has been installed in the new work, the owner normally provides the heating energy.
 - ii). New Facility – When the permanent heating and ventilating system is installed and used for temporary heat during construction, the general contractor furnishes fuel and power until substantial completion.
 - iii). Attendant – On installation requiring an attendant during operation, the contractor pays the cost of the attendant.
 - iv). Division 01 should indicate the level of temporary heat and humidity control that should be expected under the base contract.
 - v). Division 01 requirements for temporary heat should be coordinated with work specified under Division 23.
 - vi). Other sections for trade-specific temperature requirements should be coordinated.
 - vii). Temperature – The desired temperature to be maintained in the building should be specified either by the use of permanent heating units or by the use of temporary heating units.
 - viii). Where the permanent heating equipment is used to provide temporary heat, all warranties should still begin with Substantial Completion.
- 6). Temporary Power
- i). Temporary electrical service should be defined in Division 01 and the section on temporary electrical service must be coordinated with Division 26. The Division 01 Section should define the extent and amount of temporary light and power that is to be provided. If file sub bids are used the scope of the electrical file should include the installation of the temporary electrical service.
 - ii). Additions or Renovations to Existing Facilities – where existing electric services are available, the Owner normally pays the cost of the energy consumed.
 - iii). New Facility –The General Contractor will normally pay for energy consumed on the project.
 - iv). Conformity – All temporary electrical work should be provided in conformity with the National Electric Code, local ordinances and OSHA Regulations.
- 7). Other Items
- i). Maintenance – The project manual should define the extent of operation and maintenance training to be provided by the contractor.
 - ii). Operations & Maintenance Manuals – Submission of O & M manuals and related information should be included as a part of the submittal process and be a part of the submission of “Shop Drawings, Product Data, and Samples” rather than wait for the Project Close-Out Phase.
 - iii). Construction Security – The project manual should define any special type of security measures to be used during construction.

- iv). Dispute Resolution – The method of dispute resolution should be clearly stated in the contract documents. Reasonable time should be allowed on written claims.
 - v). Commissioning – The relationship between the Contractor and any independent Commissioning Agent should be defined.
- 8). Hazardous material
- i). Known hazardous materials should be treated or removed by the owner prior to seeking bids for the project. A written statement stating removal has been complete should be provided to the bidders.
 - ii). Hazardous materials discovered during construction should be handled as a change order or separate contract, but the prime bidder and sub-contractors should not be forced perform the necessary work for the abatement of this material.
 - iii). The owner should allow an appropriate extension of contract time to recognize the impact of the abatement work. Direct and indirect costs for this extension should be addressed.
- 9). Waste Disposal – The bidding documents should address issues of waste Disposal that are particular to that project.
- b. Division 02 – Existing Conditions - Division 02 is intended to describe work that is required of the Contractor to address existing condition in or on the “Site”.
- 1). Demolition – On projects involving renovation or major removal of structures, any unique disposal requirements should be addressed in the bidding documents.
- c. Division 03 – Concrete
- 1). All concrete work should be specified in this division of the specifications, including pre-cast and pre-stressed concrete work.
 - 2). Field Testing, when required, should be done only by Maine Concrete Testing Certification Board (MCTCB) Technicians or by those certified in accordance with other recognized testing standards.
- d. Division 05 – Metals
- 1). Fabricated metal items called for in specifications and detailed on other than design drawing should be so noted in the specifications.
- e. Division 06 – Wood, Plastics and Composites
- 1). Millwork included in the contract should be clearly shown.
 - 2). If pre-finished material is required, it should be clearly specified.
 - 3). AWI Guide Specification should be used as a reference to write the millwork section of the specifications.
 - 4). If more than one species or grade of wood is to be used, it should be designated in the specifications.
- f. Division 07 –Thermal and Moisture Protection
- 1). Since roofing aggregates, as specified by the roofing manufacturer, are frequently not available in Maine, such specifications should be written to allow local materials which are available in Maine, and which are acceptable to the manufacturer.
- g. Division 09 - Finishes
- 1). Painting
 - i). All painting should be included in this section. Items usually causing difficulty are field painting of structural steel, priming of woodwork and similar items including heating and electrical painting and color coding, etc. If exposed concrete is meant to be painted, the concrete finish and preparation for painting should be specifically stated. It is recommended that each coat of

paint applied should be specified a different shade to prevent misunderstanding as to the number of coats which have been applied; or, that a mill thickness be specified.

- ii). The responsibility for priming millwork should be noted in both the millwork and painting sections of the specifications.
- iii). All nail holes in woodwork should be filled by the painting contractor after the prime coat has been applied.

2). Flooring

- i). The flooring section should include a requirement to vacuum clean the substrate prior to installation of the finished floor.
- ii). On renovations where substrate conditions cannot be determined, provisions should be made for cost adjustments in the event where unacceptable substrate conditions are found.

h. Division 14 – Conveying Equipment

- 1). Where a building sprinkler system is required, the project manual should address requirements for emergency power shut-off to the elevator.
- 2). The designer should assure that all aspects of the Maine State Elevator Code as well as Federal ADA Requirements are incorporated into the design.

i. Division 22 Plumbing

- 1). Temporary toilet facilities should be specified requiring running water and sewer connections in Division 01, and cross reference in the Plumbing Division should be required.
- 2). Domestic Hot Water – The domestic hot water storage tank or domestic heat exchanger should be supplied under the plumbing specifications.

j. Divisions 21, 22, 23, 25, 26, 27, & 28

- 1). Owner Furnished Equipment – Roughing In – On all items to be provided by the owner which require embedded pipes, ducts, conduits, etc., roughing in plans should be given to the general contractor within 30 days of his requesting them.

k. Division 23 Heating, Ventilation and Air Conditioning

- 1). Underground Storage Tanks – The associated excavation, backfill, and concrete work should be specified in their respective sections

l. Division 26 Electrical

- 1). The requirements regarding temporary power and lighting should be clearly defined under Division 01.
- 2). The electric contractor's responsibilities regarding the connection to all Equipment, fixtures, heating and controls, should be clearly specified.
- 3). Under MasterFormat 2004, Electric Heat is under Division 23 – Heating, Ventilation, and Air Conditioning but where "File Bids" are used, electric heat should be included in the electrical specifications but clearly cross-referenced.

m. Division 31 Site Clearing

- 1). Excavation – Boulders less than one cubic yard should be removed at no extra cost to the owners. Boulders one cubic yard and over should be removed on unit price basis. Extra work for which unit prices are not clearly applicable should be negotiated. The attention of the general contractor should be drawn in the specifications to excavations required for any trade, and this should be noted under the section entitled “Excavation and Fill”.
- 2). Rock Blasting should be specified under level 2 Section 31 39 00 Rock Blasting or level 3 sections 31 39 13 Trench Rock Blasting and 31 39 16 Open Rock Blasting.

n. Division 32 – Exterior Improvements

- 1). Paving – Explicit specifications for gravel base and gravel surface should be used. Simple reference to “granular base” or “well – drained gravel” should not be used. On projects involving a bituminous concrete item, this item shall include “fine grading”, which shall be defined as shaping the existing base, which has been previously placed to grade with a tolerance of plus or minus one inch. Surface tolerances and finishes shall follow the specifications of the Maine Department of Transportation.
- 2). Landscape Plantings –Should be specified under Planting section of Division 32 but loam and spreading of loam should be specified under Finish Grading as a part of Division 31.

o. Division 33 – Utilities

- 1). Site Utilities – Each Site utilities should be specified in a separate section under Division 33. Excavation for site utilities shall be described in Division 31.
- 2). Drains – All site drainage systems, including perimeter drains, should be specified in Division 33.

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