

Troy School District

Bond Projects BP#25

PROJECT MANUAL

Issued: May 14, 2019

Bids Due May 28, 2019 at 1:pm

Barton
 **Malow**



**SECTION 00010
PROJECT MANUAL
TABLE OF CONTENTS**

INTRODUCTORY INFORMATION

ISSUE DATE

00001	Project Manual Cover (<i>Cover Sheet</i>)	May 14, 2019
00010	Table of Contents	May 14, 2019
00015	Listing of Documents	May 14, 2019
00030	Information and Identities	May 14, 2019

BIDDING REQUIREMENTS

00100	Advertisement to Bid	May 14, 2019
00200	Instructions to Bidders	May 14, 2019
00210	Description of Work/Special Provisions	May 14, 2019
00220	Work Scopes	May 14, 2019

024000- Demolition

042000- Masonry

051000- Steel

060000- General Trades/Carpentry

075000- Roofing

230000- Mechanical

230000- Temperature Controls

260000- Electrical

320000- Sitework & Concrete

00410	Familial Relationship Enclosure Form/Iran Economic Act Cert	May 14, 2019
00230	Schedule and Phasing	

CONTRACTING REQUIREMENTS

ISSUE DATE

00500	Agreement Form (Contract)	May 14, 2019
00810	On-Site Project Safety and Loss Control Program	May 14, 2019
00840	Hazardous Materials	May 14, 2019
00880	Regulatory Requirements	May 14, 2019

DIVISION 1 GENERAL REQUIREMENTS

01140	Use of Premises	May 14, 2019
01250	Changes in the Work	May 14, 2019
01290	Payment Procedures	May 14, 2019
01310	Meetings	May 14, 2019
01320	Communications	May 14, 2019
01330	Submittals	May 14, 2019
01360	Coordination (General)	May 14, 2019
01370	Coordination Drawings	May 14, 2019
01400	Quality Requirements	May 14, 2019
01450	Testing and Inspection Services	May 14, 2019
01500	Interim Life Safety Plan	May 14, 2019
01520	Temporary Construction	May 14, 2019
01530	Field Engineering and Layout	May 14, 2019
01540	Cutting and Patching	May 14, 2019
01550	Clean-up and Final Cleaning	May 14, 2019
01600	Forms	May 14, 2019

01630	Product Substitutions	May 14, 2019
01700	Contract Close-out	May 14, 2019
01720	Project Record Documents	May 14, 2019
01730	Operations and Maintenance Data	May 14, 2019
01740	Warrantees and Guarantees	May 14, 2019
01750	Systems Demonstration, Training and Start-up	May 14, 2019

OTHER DOCUMENTS ISSUED FOR BID PACKAGE

- Division 0 Conditions of The Contract and Division 1 General Requirements are found in the Project Manual, included herein
- Project Manual issued by Barton Malow Company dated May 14, 2019.
- TMP, Inc. Technical Specifications dated May 9, 2019
- TMP, Inc. Drawings dated May 9, 2019.

SECTION 00015
Listing of Drawings

LIST OF DRAWINGS

See Title Sheets TS.1

**SECTION 00030
PROJECT MANUAL
INFORMATION AND IDENTITIES**

This Project Manual has been prepared by CM and contains the Bidding and Contract Requirements for **Troy School District – Bond Projects BP#25** project in **Troy, MI**

PROJECT:

**Troy School District
Bond Projects BP#25**

**CONSTRUCTION MANAGER:
(Direct all Questions to CM)**

**Barton Malow Company
1140 Rankin Drive
Troy, MI 48083**

**Christa Amalio
Phone: 586.295.1412
Email: Christa.Amalio@bartonmalow.com**

OWNER:

**Troy School District
1140 Rankin Drive
Troy, MI 48083**

ARCHITECT:

**TMP Architecture
1191 W. Square Lake Road
Bloomfield Hills, MI 48302
Phone: (248) 338-4561**

SECTION 00100
ADVERTISEMENT TO BID

Troy School District requests Bid Proposals for Troy School District – Bond Projects BP#25. Bid Proposals will be received electronically through Building Connected on Thursday May 28th 2019 at 1:00PM EST. All Proposals shall be submitted through Building Connected, for instructions on how to submit a bid please follow this link: <https://buildingconnected-community.force.com/s/article/How-to-submit-your-bid-directly-through-BuildingConnected>

1. Proposals shall be based on the requirements set forth in the Project Manual by Barton Malow Company dated May 14, 2019; the bid set drawings issued by TMP, Inc. on May 9, 2019.
2. Link to the Barton Malow Public Planroom:
<https://app.buildingconnected.com/projects/5cd5b4d0c8cf2700182aacad/bid-packages>
3. Accepted Bidders will be required, as a condition precedent to award of Contract, to furnish in the amount of 100% of the contract price, satisfactory Performance Bond and Payment Bond and Certificates of Insurance as required in the Project Manual.
4. Unless otherwise specifically set forth in Section 00880 of the Project Manual, this Project is subject to state sales and/or use taxes and Bidder is required to include such taxes in its Bid Proposal.
5. Barton Malow Company has been contracted by the Owner in the capacity of Construction Manager for the Project, and as such has the rights and obligations set forth in its contract with the Owner for those services, and shall act as representative of the Owner to the extent required/allowed under its Owner contract.
6. Bid Proposals will be publicly opened Tuesday, May 28th at 1:00 PM EST, evaluated by the Owner and Barton Malow Company, Owner and the Architect, with recommended awards subsequently made by Barton Malow Company. The Owner shall not open, consider, or accept a Bid Proposal that is received after the date and time specified for bid submission in this Advertisement for Bids.
7. A pre-bid conference or walk through will be held on May 21, 2019. Please contact Barton Malow Company if you would like to walk through the building(s).
8. Bid Proposals shall be submitted through Building Connected. Bidders will be required to submit with their Bid Proposals a Bid Security by a qualified surety authorized to do business in the state where the Project is located, an OSHA Form 300 for the most recent completed year, their worker's compensation Experience Modification Rate (EMR) factor, familial disclosure form, iran sanctions form, and any other information required in the Instructions to Bidders. Bidders shall not withdraw Bid Proposals for a period of Sixty (60) Days after date for receipt of Bid Proposals.
9. The successful Bidder(s) will be required to enter into an agreement with **Owner** on the Agreement Form identified in Section 00500 of the Project Manual.
10. The right to reject any or all Bid Proposals, either in whole or in part, or to waive any informalities or irregularities therein is reserved by the Owner.
11. All Bid Proposals shall be accompanied by the sworn statement included in Section 00410 of the Project Manual, in accordance with MCL 380.1267, disclosing any familial relationship that exists between the owner(s) or any employee of the Bidder and any member of the board of trustees. Bid Proposals that do not include this sworn and notarized disclosure statement shall not be accepted.

BARTON MALOW COMPANY

END OF SECTION 00100

SECTION 00200 INSTRUCTION TO BIDDERS

1. BIDDING PROCEDURE

1.1. FORM AND STYLE OF BIDS

- 1.1.1. Bid Proposals shall be submitted using Building Connected.

1.2. BID SECURITY

- 1.2.1. Bid security in the form of a bid bond issued by a qualified surety, certified check or cashier's check in the amount of five percent (5%) of the Base Bid amount will be required at the time of submission of the Bid Proposal. Bid bonds shall be duly executed by the Bidder, as principal and by a surety that is properly licensed and authorized to do business in the state in which the Work is to be performed. All sureties providing bonds for this Project must be listed in the latest version of the Department of Treasury's Circular 570, entitled "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies", with the bond amount less than or equal to the underwriting limitation, and/or have an A.M. best rating of A- or better.
- 1.2.2. Bid bond shall pledge that the Bidder, with the understanding that if its Bid Proposal is accepted, will enter into the Agreement with the Troy School District for any of the Bid Category(ies) accepted from its Bid Proposal and will, if required, furnish performance and payment bonds covering the faithful performance of the Agreement and the payment of all obligations arising there under. The attorney-in-fact, who signs the surety bond must submit along with the bond, a certified and effectively dated copy of his/her power of attorney.
- 1.2.3. Bid bond form AIA Document A310 unmodified, is approved for use on this Project.
- 1.2.4. The bid security obligees shall be Troy School District and the amount of the bid security shall become its property in the event that the Bidder fails, within fifteen days of notice of award or receipt of the Agreement form, to execute the Agreement, and deliver the performance and payment bonds as described in the Project Manual, section 00610. In such case, the bid security shall be forfeited to the Troy School District as liquidated damages, not as a penalty.
- 1.2.5. The Owner will have the right to retain the bid security(ies) of Bidders to whom an award is being considered until either (a) the Agreement has been executed and bonds, if required, have been furnished, or (b) the specified time has elapsed so that Bid Proposals may be withdrawn, or (c) all Bid Proposals have been rejected.
- 1.2.6. Bid security will be returned to the successful Bidders after the Agreement has been executed, and acceptance of required performance and payment bonds. The bid security of Bidders that are not under consideration for award of the Agreement will be returned to those Bidders.

1.3. SUBMISSION OF BIDS

- 1.3.1. All Barton Malow K-12 and Community College projects can be bid electronically. Visit the Barton Malow planroom to see all of our projects out for bid. Please contact the Barton Malow project teams for additional information.

1.4. MODIFICATION OR WITHDRAWAL OF BID PROPOSAL

- 1.4.1. With electronic sealed bidding, you can ensure that all bids are kept confidential until the bid due date and time. Subcontractors will be able to submit and revise their bids right up to the bid due date and time, but no revisions or new bids will be accepted after the deadline has passed. [Click here for additional information on electronic sealed bidding.](#)

1.5. OPENING OF BIDS

- 1.5.1. Bid Proposals received on time will be opened publicly
 - 1.5.1.1. Bid Proposals shall be held open and irrevocable for forty five (45) days after the date for receipt of bids.

1.6. REJECTION OF BIDS

- 1.6.1. The Troy School District reserves the right to reject any or all Bid Proposals in accordance with all applicable laws.

1.7. ACCEPTANCE OF BID (AWARD)

- 1.7.1. It is the intent of the Troy School District to award the Agreement to the Lowest Responsive and Responsible Bidder in accordance with the Bidding Documents. The Troy School District shall have the right to waive any informality or irregularity in any Bid Proposal received and to accept Bid Proposals which, in its judgment, are in its own best interest.
- 1.7.2. The Troy School District shall have the right to accept Alternates in any order or combination and to determine the low Bidder on the basis of the sum of the Base Bid, Voluntary Alternates and Alternates accepted.

2. DEFINITIONS

- 2.1. Capitalized terms used in this Project Manual shall have the meanings set forth below. If a capitalized term is used herein but not defined in this Section, 00200, Part 1, it shall have the meaning set forth in the Contract Documents.
- 2.2. “**Addenda**” means the written and graphic instruments issued by the Architect and/or CM prior to the execution of the Agreement that modify or interpret the Bidding Documents by additions, deletions, clarifications, or corrections.
- 2.3. “**Agreement**” means the document defined in the Project Manual, including all other documents incorporated by reference in the Agreement.
- 2.4. “**An Alternate Bid**” (or “**Alternate**”) is an amount stated in the Bid Proposal to be added to or deducted from the amount of the Base Bid if the corresponding change in the Work, as described in the Bidding Documents, is accepted.
- 2.5. “**Architect**” means the person or entity listed in section 00030 of the Project Manual and may include professional engineers if so designated.
- 2.6. “**Base Bid**” is the sum stated in the Bid Proposal for which the Bidder offers to perform the Work described in the Bidding Documents as the base, to which Work may be added to or deducted from for sums stated in Alternate Bids.
- 2.7. A “**Bidder**” is a person or legal entity that submits a Bid Proposal in conformance with the Bidding Documents. After award of the Agreement, the Bidder will be referred to as Contractor. All Contractors on this project are considered prime/principal contractors.
- 2.8. “**Bid Categories**” are units of Work performed by a Contractor and its Subordinate Parties which form part of the total Project. The term “Bid Category” should not be confused with the term “**Technical Section**”. Technical Sections of the Specification establish quality and performance criteria, and the Bid Categories designate work scope and assignment.
- 2.9. “**Bidding Documents**” means the Bidding Requirements, the Contract Documents, and the Reference Documents collectively.
- 2.10. A “**Bid Package**” means a series of Bid Categories that are released for bidding in the same set of Bidding Documents.
- 2.11. “**Bidding Requirements**” include the Advertisement to Bid, Instructions to Bidders, Information Available to Bidders, and Bid forms and supplements.
- 2.12. “**Bid Proposal**” is a complete and properly signed proposal to do the Work of an individual Bid Category(ies) for the sums stipulated therein, submitted in accordance with the Bidding Documents.
- 2.13. The “**Contract Documents**” consist of all Contracting Requirements set forth in the Project Manual, including, but not limited to, the Contract Forms (the Agreement, Performance/Payment Bonds, and Certificates), the Conditions of the Contract (General, Supplementary or Special), the General

Requirements of the Project Manual, the Technical Specifications, Drawings, and all other documents incorporated into the Agreement by reference, all Addenda issued prior to and all modifications issued after execution of the Agreement.

- 2.14. **“Contractor”** means the entity to which the Owner issues a contract for performance of the Work.
- 2.15. **“Day”** means calendar day, unless otherwise defined in the particular Contract Document.
- 2.16. **“Hazard Communications Program”** means Contractor’s own hazard communications program that will govern project safety for its Work. The Hazard Communications Program must be submitted to CM by each successful Bidder before commencing Work and be no less stringent than Section 00810 - On Site Safety and Loss Control Program.
- 2.17. **“Hazardous Materials”** means asbestos; asbestos containing material; lead (including lead-based paint); PCB; molds; any other chemical, material, or substance subject to regulation as a hazardous material, hazardous substance, toxic substance, or otherwise, under applicable federal, state, or local law; and any other chemical, material, or substance that may have adverse effects on human health or the environment.
- 2.18. **“Lowest Responsive, Responsible Bidder”** means a Bidder Who’s Bid Proposal conforms in all material aspects to the terms, conditions, specifications and requirements of the solicitations and who has demonstrated the ability to properly perform the Work.
- 2.19. **“MBE/WBE/SBE”** means Minority Owned Business Enterprise/Women Owned Business Enterprise/ Small Business Enterprise as these terms are defined in the applicable ordinances and laws governing the Project.
- 2.20. **“Project Safety Program”** means the Contractor’s site safety program that will govern project safety for its Work. The Project Safety Program must be submitted to CM by each successful Bidder before commencing Work and be no less stringent than Section 00810 - On Site Safety and Loss Control Program.
- 2.21. **“Reference Documents”** are drawings that do not form a part of the Contract Documents and are included in the Bidding Documents as a courtesy only. The Bidder is not entitled to rely upon the accuracy of the Resource Drawings and they are not warranted to be correct or reliable by the Owner or CM. The Bidder is expected to have conducted its own investigation into the reliability or accuracy of any Reference Documents, and no adjustment to the Base Bid shall be made if such request arises or results from the Bidder’s failure to conduct such investigation.
- 2.22. **“Subordinate Parties”** means all of Contractor’s employees, workers, laborers, agents, consultants, suppliers or subcontractors, at any tier, who perform, assist with, or otherwise are involved in any of the Work.
- 2.23. A **“Unit Price”** is an amount stated in the Bid Proposal as a price per unit of measurement for materials or services as described in the Bidding Documents or in the proposed Contract Documents.
- 2.24. The **“Work”** includes all work and responsibilities performed or to be performed by Contractor under the Subcontract.

3. PART 2 - BIDDERS REPRESENTATIONS

- 3.1.1. The Owner reserves the right to request qualification forms or additional information from any Bidder before issuing documents, receiving Bid Proposals or awarding an Agreement. The Owner may, at their sole discretion, accept or reject Bidders as qualified. The right to waive any informalities or irregularities in qualification materials is reserved by the Owner.
- 3.2. BIDDER BY MAKING ITS BID REPRESENTS THAT:
 - 3.2.1. Bidder has carefully read, reviewed and understands the Bidding Documents and its Bid Proposal is made in accordance therewith.
 - 3.2.2. Bidder’s Bid Proposal is based upon the materials, systems, equipment, terms and conditions required by the Bidding Documents without exception.
 - 3.2.3. Bidder certifies that it:

- 3.2.3.1. has examined the Project site;
- 3.2.3.2. has carefully reviewed the Bidding Documents
- 3.2.3.3. has compared its examination of the Project site with the Bidding Documents;
- 3.2.3.4. is satisfied as to the condition of the Project site, any surface or subsurface obstruction, the actual levels, and all excavating, filling in, removal and demolition, measurements and quantities involved in the Work;
- 3.2.3.5. is familiar with weather conditions of the Project area;
- 3.2.3.6. has taken account of all of these factors in preparing and presenting its Bid Proposal.
- 3.2.4. Bidder further certifies that it
 - 3.2.4.1. has fully acquainted itself with the character and extent of the Owner's, CM's and other Contractor 's operations in the area of the Work
 - 3.2.4.2. has taken account of coordination of operations of others in its construction plans set forth in the Bid Proposal.
- 3.2.5. No change orders will be issued to the Contractor for or on account of costs or expenses occasioned by its failure to comply with the provisions of this paragraph, or by reason of error or oversight on the part of the Contractor, or on account of interferences by the Owner's, CM's or other contractor's activities.
- 3.2.6. The Bidder, by submitting its Bid Proposal, represents that it has carefully reviewed the project schedule, along with the related requirements of the Project's Schedule and Phasing, and acknowledges that these are acceptable and have been taken into account in preparing its Bid Proposal.

4. BIDDING DOCUMENTS

4.1. COPIES

- 4.1.1. Bidders shall use complete sets of Bidding Documents in preparing Bid Proposals. Neither the Owner, CM nor the Architect shall be responsible for errors, omissions or misinterpretations resulting from the Bidder's use of partial sets of Bidding Documents.
- 4.1.2. Copies of the Bidding Documents are being made available for the purpose of obtaining Bid Proposals for the Work only. Bidders shall not use the Bidding Documents for any other purpose. Neither the Owner, CM nor the Architect warrants the completeness and/or adequacy of the Bidding Documents.

4.2. INTERPRETATION OR CORRECTION OF BIDDING DOCUMENTS

- 4.2.1. Bidder shall promptly notify the Barton Malow Company of all ambiguities, inconsistencies, or errors that it may discover upon examination of the Bidding Documents or upon examination of the Project site and local conditions. Bidders requesting clarification or interpretation of the Bidding Documents shall make a written request, which shall reach Barton Malow Company at least 5 days prior to the date for receipt of Bid Proposals. Direct all questions to:

Contact Name: Christa Amalio
Address: 1140 Rankin
City, State, Zip: Troy, MI, 48098
Phone: 586.295.1412
Email: Christa.Amalio@bartonmalow.com

- 4.2.2. Any interpretation, correction, or change of the Bidding Documents will be made by Addendum and/or Bid Clarification. Interpretations, corrections, or changes of the Bidding Documents made in any other manner will not be binding, and Bidders shall not rely upon such interpretations, corrections and changes. Advertisement to Bid

4.3. ADDENDA and/or BID CLARIFICATIONS

- 4.3.1. Addenda and/or Bid Clarifications will be distributed to all who are known by CM to have received a complete set of Bidding Documents. Copies of Addenda and/or Bid Clarifications will be made available for inspection wherever Bidding Documents are on file for that purpose.
- 4.3.2. No Addenda or Bid Clarifications will be issued later than 3 days prior to the date for receipt of Bids except an Addendum or Bid Clarification withdrawing or postponing the request for Bid Proposals.

4.4. ALTERNATES

- 4.4.1. Each Bidder must bid on all Alternates listed in the Bid Proposal that are applicable to its Bid Category. Alternates will be fully considered in awarding the Agreement.
- 4.4.2. The Owner shall be allowed a period of 90 Days after date of receipt of the Bid Proposals to exercise the right to accept or reject any or all Alternates submitted on the Bid Proposal.
- 4.4.3. Successful Bidders shall perform all Work required for complete execution of accepted Alternates, and the Bid Proposal shall include all overhead and profit for the Work required.

4.5. VOLUNTARY ALTERNATES

- 4.5.1. All Bid Proposals must be based upon the Bidding Documents. In addition to a Base Bid Proposal, the submission of Voluntary Alternates is acceptable and encouraged. If a Voluntary Alternate is submitted for consideration, it shall be expressed on the Bid Form as an add or deduct amount from the Base Bid. The [Owner or Owner and CM] reserve the right to unilaterally accept or reject Voluntary Alternates and to determine if the Voluntary Alternates will be considered in the awarding of the Agreement.

4.6. UNIT PRICES

- 4.6.1. Each Bidder must bid on all Unit Prices listed in the Bid Proposal that are applicable to its Bid Category. Unit Prices will be fully considered in awarding the Agreement.
- 4.6.2. Successful Bidders shall perform all Work required for complete execution of accepted Unit Prices, and such Unit Prices shall include all overhead and profit for the Work required.

4.7. NO DISCRIMINATION

- 4.7.1. All Bidders shall ensure that employees and applicants for employment are not discriminated against because of their race, color, religion, sex, national origin, age, marital status, sexual orientation, or disability and in conformance with local, state and federal laws, regulations and ordinances.
- 4.7.2. In regard to any Agreement entered into pursuant to this Bid Package, minority and women owned business enterprises will be afforded full opportunity to submit Bid Proposals and will not be discriminated against on the grounds of race, color, religion, sex, national origin, age, marital status, sexual orientation, disability or any other status protected by applicable law.

4.8. To the extent that these Instructions to Bidders and applicable public bidding laws, rules, regulations or ordinances conflict with each other, the provisions of the applicable bidding laws, rules, regulations or ordinances shall govern.

4.9. The Owner expects all supplies, materials equipment or products proposed by a Bidder to meet or exceed the Specifications set forth in the Bidding Documents. Further, it is the Owner's intent that the Bidding Documents permit competition. Accordingly, the use of any patent, proprietary name or manufacturer's name is for demonstrative purposes only and is not intended to curtail competition. Whenever any supplies, material, equipment or products requested in the Bidding Documents are specified by patent, proprietary name or by the name of the manufacturer, unless stated differently, such specification shall be considered as if followed by the words "or comparable equivalent," whether or not such words appear. The Owner, in its sole and absolute discretion, shall have the right to determine if the proposed equivalent products/brands submitted by Bidder meet the Specifications contained in the Bidding Documents and possess equivalent and/or better qualities. It shall be the Bidder's responsibility to notify the Owner in

writing if any Specifications or suggested comparable equivalent products/brands require clarification by the Owner prior to the Due Date for Bid Proposals.

5. POST BID INFORMATION

5.1. POST BID INFORMATION

- 5.1.1. After the Bids are received, tabulated, and evaluated, the apparent low Bidders when so requested shall meet with CM at a post-bid meeting for the purposes of determining completeness of scope and any contract overlaps or omissions. If requested, the Bidder shall submit additional information as requested by CM. The Bidder will provide the following information at the post-bid meeting:
 - 5.1.1.1. Designation of the Work to be performed by the Bidder with its own forces including manpower for the Contractor and that of its Subordinate Parties.
 - 5.1.1.2. Detailed cost breakdown of the Bidder's Bid Proposal including labor, equipment and material unit prices.
 - 5.1.1.3. A list of names of the Subordinate Parties proposed for the principal portions of the Work.
 - 5.1.1.4. The proprietary names and suppliers of principal items or systems of materials and equipment proposed for the Work.
 - 5.1.1.5. The names and backgrounds of the Bidder's key staff members including foremen and assistants. Bidder shall be requested to establish the reliability and responsibility of the persons or entities proposed to furnish and perform the Work described in the Bidding Documents.
 - 5.1.1.6. Commitment to construction schedules, identification of items requiring long lead deliveries and manpower information in accordance with Section 00230 of the Project Manual.
 - 5.1.1.7. Signed safety program compliance, as described in the Contract Documents
- 5.1.2. Prior to award of the Agreement, CM will notify the Bidder if either the Owner, the Architect, or CM, after due investigation, has reasonable objection to any proposed Subordinate Party. If the Owner, Architect or CM has reasonable objection to any proposed Subordinate Party, the Bidder may, at its option: (1) withdraw its Bid Proposal; or (2) submit an acceptable substitute Subordinate Party with an adjustment in its bid amount to cover the difference in cost occasioned by such substitution. The Troy School District, may, at its discretion, accept the adjusted bid amount or it may disqualify the Bidder. In the event of either withdrawal or disqualification under this Subparagraph, bid security will not be forfeited, notwithstanding the terms in the Instructions to Bidders.
- 5.1.3. Upon the Award of the Agreement, the Contractor shall submit to CM a complete list of all items, products, and layouts for which shop drawings, brochures, or samples are required; name of each Subordinate Party; and date of planned submission.
- 5.1.4. The Bidder will be required to establish to the satisfaction of CM, Owner and Architect, the reliability and responsibility of the Subordinate Parties proposed to furnish and perform the Work described in the Bidding Documents.

END OF SECTION 00200

SECTION 00210
DESCRIPTION OF THE WORK/SPECIAL PROVISIONS

1. GENERAL

1.1. RELATED DOCUMENTS

- 1.1.1. All Bidders shall review all of the Bidding Documents, all Bid Category Work descriptions and all Contract Documents, immediately advise CM of any adverse factors, conflicts or ambiguities that might affect the execution of Work of this Bid Package. Each Bidder is responsible to review all Bid Category descriptions and Contract Documents and coordinate the Work accordingly. Each Bidder shall incorporate into its Bid Proposal the cost of coordination of the Work with the requirements of all related Contract Documents, as shown, specified, or required.
- 1.1.2. Each Bidder shall thoroughly examine all of the Bidding Documents for the Work of all trades so as to familiarize itself both with the Work required under its Bid Category(ies) and with Work required under all other Bid Categories.
- 1.1.3. The Bidder shall perform all Work reasonably inferable from the Bidding Documents to produce the intended results. Bidders are required to visit and examine the Project site and may arrange the visit through CM.
- 1.1.4. A complete set of bid documents are available at CM's office

1.2. PROJECT DESCRIPTION

- 1.2.1. The scope of work includes the demolition of a 10,000 square foot portion of the existing Niles Community Education Building and the installation of a parking lot in place of the demolished building area. Specific Bid Category/Work Scope descriptions are found in Section 00220.

1.3. SUMMARY OF THE BID CATEGORIES/WORK SCOPES

- 1.3.1. The following is a listing of Bid Categories for this project. All work relative to the Bid Package is identified on plans and specifications as prepared by the Architect. Each Bid Category description identifies the scope of Work to be performed by the Bidder as designated by CM.

BID CATEGORIES

024000- Demolition

042000- Masonry

051000- Steel

060000- General Trades/Carpentry

075000- Roofing

230000- Mechanical

230000- Temperature Controls

260000- Electrical

320000- Sitework & Concrete

1.4. SPECIAL PROVISIONS

- 1.4.1. The following special provisions form a part of each Bid Category Work Scope and apply to each Contractor's Scope of Work found in Section 00220.
- 1.4.2. The Bid Category/Work Scopes should in no way be construed as being all inclusive. The Work Scope is issued as a guide to aid in the assignment of Work. If conflict regarding assignment of Work exists between the drawing notes and these descriptions, the Description of the Work and Bid Category/Work Scopes will take precedence. The Contractor shall carefully review and compare the Drawings and Specifications with the Work Scopes, and if a conflict exists, the Contractor shall immediately notify CM in writing. The Bid Category numbers and the specification section numbers are not, in all cases, identical.

- 1.4.3. Bidders are required to bid the entire Bid Category. Bids will only be accepted for individual Bid Categories. A Bidder may bid more than one Bid Category. Combined bids covering several Bid Categories will not be accepted, unless separate bid amounts are listed for each Bid Category making up the combined bid amount. Review the “Instructions to Bidders” in Section 00200 for specific Bid Proposal instructions.
- 1.4.4. Each Bidder shall review the schedule enclosed in the Bidding Documents, and be prepared to review at the post-bid meetings a schedule for the engineering, fabrication, delivery and installation of its Work. This information will be considered in the award recommendation.
- 1.4.5. All Contractors are to coordinate all Work with the work of other trades for proper function and sequence (see Section 01360). Contractor must furnish approved copies of shop drawings, mock-ups, and technical data to other contractors designated by the CM for the purposes of coordination of this Work. Contractor must provide to all other trades all information (drawings, diagrams, templates, embedments) and other related Work necessary for the proper coordination of the Work of all trades. Each phase of the Work shall be coordinated, and the coordination plan approved by CM prior to proceeding. Contractor shall keep informed as to Work of all trades engaged in the Project, and shall execute Work in such a manner as not to delay or interfere with the progress of other trades involved. Contractor is required to schedule its Work so that no other party is delayed in execution of its work. Contractor is required to employ competent supervision on the Project throughout the entire period of construction to ensure proper coordination.
- 1.4.6. Contractor will furnish before any Work is started, evidence of ISO Certification or documented procedures for process control, including drawings, submittals, inspection/surveillance and training. In lieu of defined procedures, Contractor will follow CM’s documented procedures for process control.
- 1.4.7. When it is necessary to modify or tie into existing utility services, Contractor shall notify CM in writing a minimum of 48 hours prior to the planned disruption. All disruptions shall be scheduled with CM and shall be kept to a minimum time. Tie-ins and shutdowns of existing utilities may have to be performed during off hours. Contractors are to include any required premium time in the Base Bid.
- 1.4.8. If Owner will occupy the premises or a portion of the premises during the construction, Contractor shall cooperate with CM and Owner in all construction operations to minimize conflict, and to facilitate Owner occupancy.
- 1.4.9. Information pertaining to the existing building has been obtained through photographs and investigations and is indicated on the Resource Drawings. This information is not warranted to be complete or accurate. Contractor shall verify all dimensions in the field prior to ordering materials or construction and any costs or expenses arising out of its failure to do so shall be borne solely by Contractor.
- 1.4.10. The Contractor shall examine the existing site conditions and carefully compare them to the Drawings. All measurements must be verified from actual observation at the Project site. The Contractor is responsible for all Work fitting in place in approved, satisfactory and workmanlike manner in every particular. If the Contractor encounters unexpected existing site or building conditions, it shall cease operations immediately to minimize damage and shall immediately notify CM in writing. Contractor shall bear all costs, expenses or damages arising or resulting from its failure to comply with this paragraph.
- 1.4.11. Hoisting of material or equipment above occupied areas will NOT be permitted unless the existing structure has been properly verified by a licensed professional Engineer to be able to bear the load of the material or equipment being hoisted if accidentally released. It is the responsibility of the Contractor performing such hoisting to properly and adequately reinforce existing structure.
- 1.4.12. Space for electrical and mechanical lines is limited for the Project. Therefore, it is imperative that Contractor coordinate its Work with the Work of all other trades to ensure containment of

electrical and mechanical lines in space provided. Priority of space will be decided in discretion of CM, with no additional compensation, where unresolved conflict exists. If Work is not properly coordinated, Contractor shall remove and relocate Work without additional compensation.

1.4.13. The Contractor shall maintain all project record documents for all concealed Work to mark actual construction. The Contractor shall turn over to CM all project record documents upon completion of Work by the Contractor, in a format to be determined by CM. The Contractor shall make all project record documents available to the Owner, CM and/or the Architect for inspection and review. The Contractor's failure to maintain such documents adequately shall entitle the Owner and/or CM to withhold payment until such documents are current and up to date.

1.4.14. The Contractor shall submit a daily report to CM on a daily basis on the form provided to Contractor by CM.

1.4.15. All Contractors shall attend all meetings as required by CM.

1.5. OWNER EQUIPMENT COORDINATION

1.5.1. The Owner Furnished and Contractor Installed (OF/CI) equipment as listed in the Individual Contractor's Work scopes found in Section 00220 shows the Contractor responsible to schedule delivery, receive the equipment and accessories F.O.B. jobsite, inspect, protect, store, handle and move into position, provide all coordination with applicable trades for rough-in requirements and final connections, marshal the appropriate trades as a composite installation crew, and assist in initial startup.

1.5.2. Refer to the Drawings to determine quantities.

END OF SECTION 00210

SECTION 00230 SCHEDULE AND PHASING

1. GENERAL

1.1. MILESTONE SCHEDULE

- 1.1.1. The following are the milestone schedule dates for the listed Work and will become a part of the Contract Documents. The master construction schedule will be developed after award of the Agreement with Contractor input.

Building	Milestone Activity	Scheduled Start	Scheduled Completion
Niles Community Education Building	Owner Move Out of Niles Space	June 15, 2019	July 1, 2019
Niles Community Education Building	Investigation (of existing conditions)	June 15, 2019	July 1, 2019
Niles Community Education Building	Remove trees, light pole, camera, etc. (ext items) July 1	July 1, 2019	July 8, 2019
Niles Community Education Building	Demo of Niles Bldg & Build Temp Walls	July 8, 2019	
Niles Community Education Building	Complete Demo of Niles Building		August 2, 2019
Niles Community Education Building	Rebuild Niles Bldg (new walls, slab, steel, etc.)	August 5, 2019	October 1, 2019
Niles Community Education Building	Demo Sidewalks, Asphalt, storm lines	September 9, 2019	September 18, 2019
Niles Community Education Building	Grade parking lot area & eng fill	September 19, 2019	September 27, 2019
Niles Community Education Building	Install Sidewalks	September 30, 2019	October 3, 2019
Niles Community Education Building	Install Curbs	October 7, 2019	October 10, 2019
Niles Community Education Building	Install Stone for Asphalt Area	October 14, 2019	October 18, 2019
Niles Community Education Building	Pave Parking lot area	October 21, 2019	October 25, 2019
Niles Community Education Building	Site Restoration	October 28, 2019	November 1, 2019

- 1.1.2. It is expressly agreed that time is of the essence for the completion of Work under the Agreement and Contractor agrees to perform the Work within the allotted time and in the manner specified. Contractor shall be liable for any and all damages and expenses suffered by the Owner or CM arising or resulting from the failure of Contractor to perform the Work in accordance with the construction schedule.

1.2. CONSTRUCTION SCHEDULE DEVELOPMENT PROCESS

- 1.2.1. Contractor agrees to commence Work in the field within five (5) Days after being notified to do so by the CM. Contractor shall diligently perform and fully complete all Work to the satisfaction of CM and Owner.
- 1.2.2. Work shall begin at such points as CM may designate and shall be carried to completion with the utmost speed.
- 1.3.2. Contractor shall submit to CM within fifteen (15) Days of award of the Agreement all necessary scheduling information, in form and substance satisfactory to CM of all activities contained in the Contractor's scope of Work, including activity descriptions and durations in working days, for shop drawings, fabrication, delivery and installation of products, materials and equipment. This

schedule shall identify precedent relationships between Contractor's activities and those of other contractors, the dollar value, necessary manpower loadings, and precedent activities for other contractors. The activities on the schedule must be at a level of detail approved by CM and should agree with the terminology and building sequencing established by CM. CM will compile all Contractors' schedules and develop a project master construction schedule. Once the individual contractors schedules are agreed upon by CM, this project master construction schedule will become the project plan for construction.

- 1.3.3. Special requirements and/or sequencing issues should be brought to the attention of CM. It is intended the milestones remain in effect and all Bidders agree to accept the milestone dates. CM reserves the right to revise the project master construction schedule as deemed necessary.
- 1.3.4. CM shall periodically update the project master construction schedule and display it at the Project site. Contractor shall familiarize itself with the project master construction schedule and how it will affect or modify its operations, including coordination with the activities of other contractors. Reasonable changes in sequencing, durations and phasing are to be expected with each master schedule update. These changes will be made by Contractor at no additional cost. Reasonable changes in sequencing, durations, and phasing are to be expected with each master schedule update. These changes will be made by Contractor at no additional cost.
- 1.3.5. If it is apparent Contractor is unable to perform its Work in the sequence indicated or the time allotted, Contractor must notify CM within five (5) Days after initial publication of the project master construction schedule. Contractor's schedule of activities may be re-sequenced, and the schedule may be adjusted, provided all Work is completed within the stated milestone dates and provided CM and affected contractors are notified of the change within five (5) calendar days of receipt of the schedule and the change does not otherwise negatively impact the other scheduled work; otherwise, the project master construction schedule shall be deemed accepted by all parties and becomes a contractual requirement for each Contractor.
- 1.3.6. If Contractor delays progress for any reason other than those delays specifically excused under the Contract Documents, Contractor will take all necessary steps to expedite its Work to maintain milestone target dates at no expense or additional cost to Owner or CM.
- 1.3.7. If Contractor is behind schedule and is so notified by CM, Contractor shall be required to accelerate the Work at its own expense. Contractor shall furnish to CM a short interval schedule of its Work showing location, number of men and crew required to get back on the agreed upon master construction schedule. If Contractor fails to maintain and meet the short interval schedule, Owner through CM reserves the right to take whatever steps it deems necessary in its sole discretion to recover the schedule at the Contractor's expense. The Contractor shall employ such means as overtime work, multiple work shifts, and additional equipment, all without additional compensation, and shall continue to do so until the progress of the Work, in the opinion of CM, is in conformance with the master project construction schedule.
- 1.3.8. Contractor agrees that it shall have no claim against the Owner, Architect, or CM for an increase in the contract price or for a payment or allowance of any kind for damage, loss, or expense arising or resulting from delays, regardless of whether the delay is the basis for an extension of time. This provision includes claims for damage, loss, or expense arising or resulting from interruptions to, or necessary suspension of, Contractor's Work to enable other contractors to perform their work.

END OF SECTION 00230

SWORN AND NOTARIZED FAMILIAL DISCLOSURE STATEMENT**FAMILIAR DISCLOSURE AFFIDAVIT**

The undersigned, the owner or authorized office of the below-named contractor (the "Contractor"), pursuant to the familial disclosure requirement provided in this proposals, hereby represents and warrants that, excepts as provided below, no familial relationship exists between the owner or key employee of the Contractor, and any member of the Troy School Board or the Troy School Superintendent. A list of the School District's Board of Education Members and its Superintendent may found at <http://www.troy.k12.mi.us>.

List any Familial Relationships:

Contractor:

Print Name of Contractor

By: _____

Its: _____

Subscribed and sworn before me, this _____

Seal:

day of _____, 20 ____, a Notary Public

in and for _____ County, _____

(Signature)
NOTARY PUBLIC

My Commission expires _____

*CERTIFICATION OF COMPLIANCE – IRAN ECONOMIC SANCTIONS ACT***Michigan Public Act No. 517 of 2012**

The undersigned, the owner, or authorized officer of the below-named Company, pursuant to the compliance certification requirement provided in Troy School District's Request For Proposal, the "RFP", hereby certifies, represents, and warrants that the Company and its officers, directors and employees, is not an "Iran Linked Business" within the meaning of the Iran Economic Sanctions Act, Michigan Public Act No. 517 of 2012 (the "Act"), and that in the event the Company is awarded a contract by Troy School District as a result of the aforementioned RFP, the Company is not and will not become an "Iran Linked Business" at any time during the course of performing any services under the contract.

The Company further acknowledges that any person who is found to have submitted a false certification is responsible for a civil penalty of not more than \$250,000.00 or two (2) times the amount of the contract or proposed contract for which the false certification was made, whichever is greater, the cost of Troy School District's investigation, and reasonable attorney fees, in addition to the fine. Moreover, any person who submitted a false certification shall be ineligible to bid on a request for proposal for three (3) years from the date the it is determined that the person has submitted the false certification.

Contractor:

Print Name of Contractor

By: _____

Its: _____

Subscribed and sworn before me, this _____ Seal:

day of _____, 20 _____, a Notary Public

in and for _____ County, _____

(Signature)
NOTARY PUBLIC

My Commission expires _____

END OF SECTION 00410

SECTION 00500 AGREEMENT

1 AGREEMENT FORM

- 1.01 The form of Agreement that will be used for Work under this Bid Package shall be AIA Document 132 Standard Form of Agreement between Owner and Contractor, CMA 2009 Edition. The above Agreement Form is included immediately behind this section.

2. GENERAL CONDITIONS OF THE CONTRACT

- 2.1. AIA 232 Document **General Conditions of the Contract for Construction, 2009 Edition** is bound within this Project Manual and is a part of the Contract Documents.

3. INSURANCE

- 3.1. The description box on the ACORD certificate must be endorsed as follows:

For Troy School District 2013 Bond Projects: Barton Malow Company, Troy School District, are added as additional insureds on the Insured's commercial general liability policy, excess liability policy, automobile liability policy, and contractor's pollution liability policy, with respect to liabilities arising out of the operations or "work" performed by or on behalf of the Insured and in accordance with all Contractor requirements for such coverage. Coverage for the additional insureds is primary and non-contributory with any other insurance available to the additional insureds, whether such other insurance is available on a primary or excess basis. Waivers of subrogation apply in accordance with Contractor requirements.

- 3.2. A sample of the Certificate of Insurance (ACORD) form at the end of this Section.
- 3.3. CM Contractor Insurance Requirements for Agency Work, PRO 15.14, shall govern this Project. A copy of these Insurance Requirements is included in the following page(s):



**BARTON MALOW COMPANY
CONTRACTOR
INSURANCE REQUIREMENTS**

For agency work

March 10, 2008

1. As a condition of performing work under the Agreement, Contractor will keep in force, at all times during performance of the Work, policies of insurance covering all Basic Insurance Requirements and any applicable Supplemental Insurance Requirements. The requirements identified below are minimum requirements. If the Agreement or other Contract Documents impose additional or higher standards, Contractor shall meet those as well. Where a Controlled Insurance Program ("CIP") is specified in the Contract Documents, these insurance requirements shall not apply to coverages supplied by the CIP, but shall apply to coverages which Contractor is required to carry outside the scope of the CIP.

2. **Basic Insurance Requirements**

- 2.1. Workers' Compensation covering Contractor's statutory obligations in the State(s) in which the Work is to be performed or Federal statutory obligations, if applicable to the Project, and Employers' Liability insurance with limits of liability of \$1,000,000 EL Each Accident, EL Disease – Each Employee, and EL Disease – Policy Limit. Where applicable, a US Longshore and Harborworker's Compensation Act endorsement must be included.

- 2.1.1. If Contractor employs the services of leased employees for the Work or for a portion of the Work, it will be required to submit evidence, to the satisfaction of Barton Malow Company, that such leased employees are fully covered by the minimum limits of Workers' Compensation and Employers' Liability Insurance. Such evidence shall include, but not be limited to, submission of the applicable leasing agreement.

- 2.2. Automobile Liability insurance with the limit of \$1,000,000 per accident covering Contractor's owned, non-owned and hired automobiles.

- 2.3. Commercial General Liability insurance written on the 1988 ISO OCCURRENCE policy form or subsequent versions with limits of liability as follows:

General Aggregate	\$ 2,000,000
Products-Completed Operations Aggregate	\$ 2,000,000
Personal/Advertising Injury	\$ 2,000,000
Each Occurrence	\$ 2,000,000

This coverage shall include coverage for premises-operations, independent contractors' protective, products and completed operations, personal injury and broad form property damage (including coverage for explosion, collapse, and underground hazards), and Contractual Liability protection with respect to Contractor's indemnification obligations under the Contract Documents. Products-completed operations coverage must be maintained for at least two years after final completion of the Project.

3. **Supplemental Insurance Requirements**

- 3.1. Watercraft Protection and Indemnity Liability insurance if any of the Work is on or over navigable waterways or involves use of any vessel. Limits are to be approved by Barton Malow Company in writing.
- 3.2. Aircraft Liability insurance if any aircraft is used in performance of the Work. Limits are to be approved by Barton Malow Company in writing.
- 3.3. Railroad Protective Liability insurance if any of the Work is on or within 50 feet of any railroad or affects railroad property, including but not limited to tracks, bridges, tunnels, and switches. Limits are to be approved by Barton Malow Company in writing.
- 3.4. Professional Liability insurance, if Professional Services are provided, with limits of liability as follows:

Each Claim	\$ 5,000,000
Aggregate	\$ 5,000,000

Provided, however, that if the Subcontract Price is \$10,000,000 or less, then the following limits of liability shall apply:

Each Claim	\$ 2,000,000
Aggregate	\$ 2,000,000

Contractor shall keep such Professional Liability insurance in force during the Agreement, and for three years after final completion of the Project.

- 3.5. Pollution Liability insurance, which must be on an occurrence basis, if Environmental Services are provided. "Environmental Services" means any abatement, removal, remediation, transporting, or disposal of a Hazardous Material, or any assessments or consulting relating to same. Limits of liability for Pollution Liability insurance shall be as follows:

Each Occurrence	\$ 5,000,000
Aggregate	\$ 5,000,000

4. General Provisions

- 4.1. Every policy must be written by an insurance company licensed in the state where work is being done and is reasonably acceptable to Barton Malow Company and Owner.
- 4.2. Limits for Employer's Liability, Commercial General Liability and Automobile Liability may be attained by a combination of an underlying policy with an umbrella or excess liability policy.
- 4.3. "Barton Malow Company," Owner, and all other entities as required in the Contract Documents shall be endorsed as additional insureds on Contractor's liability insurance (including general liability, excess liability, automobile liability and pollution liability, where applicable) with respect to liability arising out of activities, "operations" or "work" performed by or on behalf of Contractor, including Barton Malow Company's general supervision of Contractor, products and completed operations of Contractor, and automobiles owned, leased, hired or borrowed by Contractor. The coverage provided by the additional insured endorsement shall be at least as broad as the Insurance Service Office, Inc.'s Additional Insured, Form B CG 20 10 11 85 or CG 20 26 11 85. Forms that do not provide additional insured status for completed operations will not be accepted. In no case shall any additional insured endorsement exclude coverage for Barton Malow Company's or Owner's own negligence nor limit coverage for Barton Malow Company or Owner only to potential liability incurred solely as a result of Barton Malow Company's or Owner's acts or omissions. Furthermore, nothing in the additional insured endorsement shall limit Barton Malow Company's or Owner's products-completed operations coverage to only those liabilities arising from Contractor's "ongoing operations".
- 4.4. Contractor will furnish, before any work is started, certificates of insurance and copies of any additional insured endorsements for Contractor's liability policies showing the required coverages. Receipt by Barton Malow Company of a non-conforming certificate of insurance without objection, or Barton Malow Company's failure to collect a certificate of insurance, shall not waive or alter Contractor's duty to comply with the insurance requirements. Modifications to these insurance requirements will not be effective unless made in a writing executed by an authorized representative of Barton Malow Company. Upon written request by Barton Malow Company, Contractor will provide copies of its insurance policies.
- 4.5. Evidence of the required insurance is to be provided to Barton Malow Company on ACORD Certificate Form 25-S and must indicate:
- 4.5.1. Any coverage exclusions or deviations from the 1988 ISO commercial general liability form or subsequent versions;
- 4.5.2. A Best's rating for each insurance carrier at A minus VII or better;
- 4.5.3. That the issuing insurance company will provide thirty (30) days written notice of cancellation to the certificate holder and the words "endeavor to" and "but failure to mail such notice shall impose no obligation or liability of any kind upon the company, its agents or representatives" do not apply or have been removed;
- 4.5.4. That additional insured endorsements have been provided as required under the Contract Documents; and
- 4.5.5. Any deductibles over \$10,000 applicable to any coverage.
- 4.6. All coverage must be primary and not excess over or contributory with any other valid, applicable, and collectible insurance or self-insurance in force for Barton Malow Company, Owner, or other additional insureds.
- 4.7. Contractor will provide full coverage for all of Contractor's equipment, property and tools used in the Work.
- 4.8. Contractor shall waive, and shall require (by endorsement or otherwise) its insurers providing the coverage required by these insurance requirements to waive, subrogation rights against Barton Malow Company, Owner, and all other additional insureds for losses and damages incurred and/or paid under the insurance policies required by these insurance requirements or other insurance applicable to Contractor or its Subordinate Parties, and will include this same requirement in contracts with its Subordinate Parties. If the policies of insurance referred to in this paragraph require an endorsement to provide for continued coverage where there is a waiver of subrogation, the owners of such policies will cause them to be so endorsed.

- 4.9. Contractor will send or fax a copy of these insurance requirements to its agent when an insurance certificate is requested to assure that the policies comply with the insurance requirements.
- 4.10. If Contractor requires its Subordinate Parties to provide additional insured endorsements in favor of Contractor, those endorsements shall be extended to Barton Malow Company, Owner and all other required additional insureds.
- 4.11. Contractor's duty to provide the insurance coverage set forth in these insurance requirements is a severable obligation from Contractor's indemnification obligations under the Contract Documents. Nothing in these insurance requirements shall be deemed to limit Contractor's liability under the Agreement.
- 4.12. If these insurance requirements are used in conjunction with a Project where an Affiliated Company of Barton Malow Company is acting as Construction Manager, Design Builder or otherwise (the "Construction Entity"), the term "Barton Malow Company" as used in these insurance requirements shall be deemed to be replaced with the name of the Construction Entity, and the additional insured requirements of Section 4.3 above shall be amended to include "Barton Malow Company", and all partners and/or members of the Construction Entity as applicable. "Affiliated Company" means any entity in which Barton Malow Company has an ownership interest.

END OF DOCUMENT PRO 15-14

4. BOND REQUIREMENTS

4.1. PERFORMANCE BONDS AND PAYMENT BONDS

- 4.1.1. Troy School District will, require Contractor to furnish a Performance Bond and a Payment Bond, in amounts equal to the Agreement price, by a qualified surety naming both the Owner and CM as Obligees. All sureties providing bonds on this Project must be listed in the Department of Treasury's Circular 570, entitled "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" with the bond amounts less than or equal to the underwriting limitation indicated in the Circular, and/or must have an A.M. Best rating of A – VII or better. Bonds shall be duly executed by the Contractor, as principal, and by a surety that is licensed in the state in which the Work is to be performed.
- 4.1.2. The Contractor shall deliver the required bonds to CM prior to execution of the Agreement. If the Work is to be commenced prior thereto in response to a letter of intent, the Bidder, at a minimum, shall submit evidence to the satisfaction of CM that such bonds will be furnished prior to commencement of on-site Work. In no event may the Contractor commence on-site Work without the required bonds properly issued and delivered.
- 4.1.3. Performance Bond and Payment Bond unmodified form AIA Document or A312 (1984 Edition) must be used for this Project.
- 4.1.4. The Bidder's proposed surety must be acceptable to the Owner and CM. If, at any time, after acceptance of the Contractor's bonds, the surety fails to meet the stated criteria Contractor must, as a precondition to continuing Work and receiving further payments, replace the bonds with bonds from a surety that meets the stated criteria.
- 4.1.5. The Performance and Payment Bond penal sums (i.e., the Agreement price) must be listed as a separate line item in the schedule of values.
- 4.1.6. In the event of a Change Order, the penal sum of any required Performance and Payment Bonds shall be adjusted to equal the adjusted Contract Price. CM or Owner shall have the right to request submission of bond riders, issued by the original qualified surety, evidencing that such adjustments to the penal sum of the bonds have been accomplished. Notwithstanding the foregoing, in the next pay application after the Agreement price has been increased by twenty-five percent (25%) or more, as a condition precedent to payment, Contractor shall deliver a bond rider issued by the original qualified surety evidencing that the appropriate adjustment in penal sums has been accomplished.

END OF SECTION 00500

SECTION 00810
ON-SITE PROJECT SAFETY AND LOSS CONTROL PROGRAM

1 SUBCONTRACTOR'S SAFETY REQUIREMENTS

1.01 Generally the Subcontractor

- 1.01.1 is responsible for its own Safety Program for Work on this Project that is at least as stringent as the requirements set forth in this section of the Project Manual.
- 1.01.2 shall provide a safe workplace and shall otherwise take all precautions for the safety of Subordinate Parties and persons and property in or near the premises where Work is being performed.
- 1.01.3 shall comply with all applicable federal, state and local laws, rules and regulations, including, but not limited to, applicable provisions of the Occupational Safety and Health Act ("OSHA") and/or the governing state law.
- 1.01.4 shall comply with all requirements stated in the Site Specific Safety Instructions (SSSI) form or elsewhere in the Contract Documents.
- 1.01.5 shall ensure that its employees understand and comply with applicable safety and health programs, rules, and regulations.
- 1.01.6 will assign an individual to act as Safety Representative who will have the responsibility of resolving safety matters, and act as a liaison among Subcontractor, CM and the Owner. The Safety Representative must be a person who is capable of identifying existing and predictable hazards in surroundings that are unsanitary, hazardous or dangerous to employees, and has the authority to take prompt corrective measures to eliminate them. The Safety Representative must meet the standards for a Competent Person under applicable law when required (scaffolding, confined spaces, etc.). The Safety Representative must be on site full time. The Safety Representative or an alternate must attend periodic safety meetings as directed by CM. The safety representative must have completed the OSHA 30 hour Construction Training Course.
- 1.01.7 shall ensure that its site supervisors and/or Safety Representative attend a pre-construction meeting where planning for safe execution of the project will be addressed.
- 1.01.8 is fully responsible for all Hazardous Materials it creates or releases in connection with, or brings to, the Project. Subcontractor shall immediately report to CM any Hazardous Materials that it discovers or which are released at the Project.
- 1.01.9 Minimum training for on-site employees shall include basic safety orientation, task-specific safety instruction, weekly Tool Box Talks, and other periodic safety meetings. Subcontractor shall document all such training.
- 1.01.10 shall self-inspect its areas of control to assure compliance with the safety requirements.
- 1.01.11 All on-site employees of either Subcontractor] or its Subordinate Parties are required to report any unsafe act or condition and any work-related injuries or illness immediately to a supervisor. If the act or condition can be safely and easily corrected, the employee or supervisor should make the correction.
- 1.01.12 shall notify CM immediately of all injuries requiring clinical attention and all property damage potentially in excess of \$1,000.
- 1.01.13 shall have emergency procedures to deal with the immediate removal and treatment, if necessary, of any employee who may be injured or become ill. Subcontractor] shall keep on the Project site a first-aid kit supplied according to current regulations, and shall have on-site a person trained to administer first aid.
- 1.01.14 shall inform CM of the arrival of any federal or state inspector or compliance officer prior to touring the site. Any reports, citations, or other documents related to the inspection shall be provided promptly to Barton Malow.

- 1.01.15 shall have a written Substance Abuse Policy. The use or possession of illegal drugs or the use of alcohol while performing Work on the Project are strictly prohibited and will lead to immediate removal from the Project.
- 1.01.16 shall be responsible for payment of all safety-related citations, fines and/or claims arising out of or relating to its Work levied against the Owner, Architect, CM, or their employees or affiliates.
- 1.01.17 CM has the right to require that Subcontractor H submit monthly its hours worked and incident rates for the Project.
- 1.02 Additional CM Requirements
 - 1.02.1 Work crews shall conduct a Job Hazard Analysis (JHA,) discussion (i.e. Huddle) to plan for safe performance before beginning any work task. Subcontractor is required to prepare a written record of each JHA.
 - 1.02.2 All workers, management, and visitors shall wear approved hard hats while on site, outside the trailers. Cowboy-style hard hats are prohibited. Hardhats must not be removed to use welding shields. Welding shields must attach to hardhats or be hand held.
 - 1.02.3 Sleeved shirts (minimum of four inches), long pants, and durable work boots are required minimum clothing.
 - 1.02.4 Personal cell phones are not to be used on construction sites except to report an emergency or on approved break time. Use of business cell phones must not interfere with jobsite safety.
 - 1.02.5 Personal radios or music players are not permitted.
 - 1.02.6 All persons working at elevations of six feet or greater must have 100% continuous fall protection. Engineering controls are preferred, but personal fall arrest systems are also permissible. An exception is permitted for safe use of ladders up to 24 feet long.
 - 1.02.7 Subcontractor is responsible to repair or restore any barricade that it modifies or removes.
 - 1.02.8 Class II III (household) stepladders are prohibited; metal ladders are strongly discouraged.
 - 1.02.9 All scaffolds must be inspected daily and before each use for safety compliance. Scaffold inspection tags must be used. Scaffolds shall never be left in an unsafe condition and must be removed/disabled immediately if not to be used again.
 - 1.02.10 All persons operating cranes must be certified as crane operators by the National Commission on the Certification of Crane Operators (NCCCO), Crane Institute Certification (CIC) or Operating Engineers Certification Program (OCEP). Daily written crane inspection reports must be prepared by the operator and kept with the crane, available for inspection.
 - 1.02.11 Riding the headache ball is prohibited.
 - 1.02.12 All dozers, loaders, tractors and end loader backhoes must have functioning backup alarms.
 - 1.02.13 Keep equipment at least 15 feet from energized power lines.
 - 1.02.14 Electrical, pneumatic, and other energy systems that could be accidentally energized or started up while work is in process must be locked out (not merely tagged out).
 - 1.02.15 Only fire retardant materials may be used to build shanties or other temporary enclosures inside of buildings finished or under construction. Shanties shall be continually policed by their occupants to prevent the accumulation of waste or other combustibles.
 - 1.02.16 Engineering controls must be used to restrain silica dust per applicable law. Dry cutting without engineering controls is prohibited.
 - 1.02.17 The Contractor is required to design and implement a Stretch and Flex program for their employees. The purpose of the program is to gently condition the muscles and tendons for the workers before they engage in their duties in order to avoid injury. All contractors of any tier shall ensure that all employees participate in stretching exercises at the beginning of the work

day. It is recommended that you consult with your insurance carrier, licensed physician or other medical personnel to develop suitable stretches for your work crew.

- 1.02.18 The Contractor is required to implement a glove program. All workers performing construction work must wear appropriate protective work gloves. When not performing work gloves must be kept available for immediate use. Cut resistant work gloves are required for any operation with sharp material or cut potential.

2 Subcontractor's SAFETY SUBMITTALS

- 2.01 Subcontractors shall provide copies of the following written safety submittals to CM at the times indicated:

Submittal	Timing
Site-specific Safety Program, including substance abuse policy, hazard communication program, and Material Safety Data Sheets (MSDS)	Before on-site work begins
Tool Box Talk Reports	Weekly
Incident Reports (OSHA form 301 or equivalent)	Within 24 hours of incident
Pre Task/Daily Reports	Daily
Stretch and Flex program	Before on-site work begins

- 2.02 Barton Malow's receipt of the Safety Program or other submittals from Subcontractor does not constitute approval of the Program or submittal or permission to deviate from the requirements of the Contract Documents and applicable law.
- 2.03 Subcontractor will allow inspection of, and CM may request copies of, any and all safety-related documents and records in its possession relating to the Project.

3 CM RIGHTS

- 3.01 **Safety Hazard Notifications** may be issued to the Subcontractor when an unsafe act or condition is reported or observed. CM shall not be required to supervise the abatement or associated reprimand of unsafe acts or conditions within a Subcontractor's scope of work as this is solely the responsibility of Subcontractor. Nevertheless, CM has the right, but not the obligation, to require Subcontractor to cease or abate any unsafe practice or activity it notices, at Subcontractor's sole expense.
- 3.02 Contractor/Subcontractor's failure to comply with the contract safety requirements will be considered a default of the Agreement, and may result in remedial action including, but not limited to, withholding of payment of any sums due or termination.
- 3.03 CM's failure to require the submission of any form, documentation, or any other act required under this Section, 00810, of the Project Manual shall not relieve the Subcontractor from any of its safety obligations.
- 3.04 Nothing in this Section or in this Agreement makes CM responsible or liable for protecting Subcontractor's employees and other Subordinate Parties or assuring or providing for their safety or preventing accidents or property damage.
- 3.05 All requirements referenced in this Section 00810 are binding on Subcontractor and all of its Subordinate Parties, even where such requirements may exceed the standards of applicable law.

END OF SECTION 00810

SECTION 00840 HAZARDOUS MATERIALS

1. DEFINITION OF HAZARDOUS MATERIALS

- 1.1. A “Hazardous Material”, as used in this Project Manual means asbestos; asbestos containing material; lead (including lead-based paint); PCB; molds; any other chemical, material, or substance subject to regulation as a hazardous material, hazardous substance, toxic substance, or otherwise, under applicable federal, state, or local law; and any other chemical, material, or substance that may have adverse effects on human health or the environment.

2. AWARENESS OF HAZARDOUS MATERIALS

- 2.1. Each Contractor shall be constantly aware of the possible discovery of Hazardous Materials. Should Contractor encounter any Hazardous Material or suspected Hazardous Material, the Contractor shall immediately stop Work in the area affected and report the condition to CM.
- 2.2. If the Contractor encounters any Hazardous Material or suspected Hazardous Material, the Contractor agrees to immediately initiate the required procedures of the Environmental Protection Agency (EPA), and/or state or local agencies having jurisdiction to protect any and all persons exposed to the affected areas or adjacent areas affected thereby
- 2.3. Contractor is fully responsible for all Hazardous Materials it creates or releases in connection with, or brings to, the Project
- 2.4. Each Contractor shall be responsible to bind ALL of its personnel and its Subordinate Parties to the provisions in the contract documents related to hazardous materials and to instruct each employee of its own duty to report any and all suspected Hazardous Materials and to comply with all applicable laws.
- 2.5. ABSOLUTELY NO MATERIAL SHALL BE BROUGHT ON OR TO THE PROJECT SITE THAT DOES NOT HAVE A MANUFACTURER'S LABEL STATING CONTENTS.
- 2.6. The Contractor shall comply with all applicable federal and state laws, rules, ordinances and regulations regarding transportation, storage, spills, releases and disposal of Hazardous Materials.
- 2.7. No asbestos or asbestos-containing material will be brought to the jobsite or incorporated into the Work by Contractor or its Subordinate Parties.

END OF SECTION 00840

SECTION 00880
REGULATORY REQUIREMENTS

1. STANDARDS, CODES AND REGULATION

- 1.1. All Work is to comply with the rules and regulations of governing bodies having jurisdiction.
- 1.2. Standards, codes and regulations published by Manufacturer's associations, governmental agencies and other regulatory authorities form a part of these Specifications as minimum requirements. Such references include the latest issue and legal requirements in force.
- 1.3. Where differences occur between the Contract Documents and such standards, the strictest requirements shall take precedence.
- 1.4. Supply all materials and perform all Work in accordance with the Manufacturer's specifications and installation procedures, and in conformance with published Trade and Manufacturers' association standards, unless specifically noted otherwise in the Contract Documents.

2. PERMITS AND FEES

- 2.1. The Troy School District will obtain and pay for the General Building Permit.
- 2.2. Other than the general building permit, Contractor shall provide and pay for all other permits, assessments, governmental fees, bonds, connection charges, licenses and inspection fees and any other charges necessary for the proper execution and completion of the Contractor's Work.
- 2.3. Contractor is to provide, pay for and coordinate all other permits, fees, inspections, and city, county, state, federal and governing authority approvals required for the successful completion of the Work contained within its respective Bid Category and deliver required certificates of inspection and approvals to CM.
- 2.4. This Project is under but not limited to the jurisdiction of the
 - MICHIGAN DEPARTMENT OF LABOR FOR MECHANICAL AND ELECTRICAL
 - STATE OF MICHIGAN FIRE MARSHAL DIVISION
 - MICHIGAN DEPARTMENT OF PUBLIC AND (COUNTY) DEPARTMENT OF PUBLIC HEALTH
 - Site water and sewer utilities are under the jurisdiction of the COUNTY DRAIN/ROAD COMMISSION authorities

3. TAXES

- 3.1. This Project is subject to all applicable state Sales Tax and/or Use taxes, and Bidder must include such taxes in its Bid Proposal. All other taxes applicable to the project at the time of the bid are to be included in the bid amount and will be the responsibility of Bidder.

END OF SECTION 00880

SECTION 01140
USE OF PREMISES

1 RULES AND ENFORCEMENT:

- 1.1. Contractor and its Subordinate Parties shall be subject to rules and regulations for the conduct of the Work as stated herein and as the Owner or CM may establish.
- 1.2. Willful disregard of the following will be grounds for requiring the offending person(s) to be removed from the Project, and may subject the Contractor to termination under the Agreement.

2 USE OF PREMISES AND DELIVERIES

2.1. ACCESS TO WORK:

- 2.1.1. Before starting the Work, Contractor shall ascertain from CM what entrances, routes or roadways shall be used for access to the Work, and use only those designated for movement of personnel, materials and vehicles to and from the Project site.
- 2.1.2. Close coordination is required of Contractor with the Owner, CM, other contractors, the city and others having an interest in the Project to assure that Work on the site, access to and from the site and the general conduct of operations is maintained in a safe and efficient manner, and that disruption and inconvenience to existing streets and property is minimized.
- 2.1.3. Contractor is responsible to review the site and be familiar with all existing conditions within and around the Owner's property including local conditions and requirements.

2.2. ENTRANCES AND DRIVES

- 2.2.1. Specific entrances for material deliveries, equipment deliveries and worker access to the Project site will be as designated/directed by CM.
- 2.2.2. Selected entrances to the Project site will remain open for use during normal working hours.
- 2.2.3. At no time are vehicles to be parked, whether attended or not, in the Owner's entrances or drives.
- 2.2.4. Any material delivery which will tie up the Owner's entrances or drives shall be pre-scheduled with the Owner through CM.
- 2.2.5. Owner's deliveries and operations will take precedence over scheduling of construction deliveries.

2.3. ACCESS TO BUILDINGS:

- 2.3.1. Maintain free access to all buildings and areas of the site for designated vehicles, service vehicles and firefighting equipment, and at no time shall block off or close roadways or fire lanes without providing auxiliary roadways and means of entrance acceptable to the Owner and CM.
- 2.3.2. Maintain a clean and safe passageway for the Owner's operations and personnel in existing areas, and maintain clearances adjacent to and in connection with the Work performed. Fire hydrants must remain accessible at all times.
- 2.3.3. Give the Owner and the local fire department at least forty-eight (48) hours' notice of any such changes of routes.

2.4. SITE PARKING:

- 2.4.1. There is on-site parking for Contractors and their Subordinate Parties' employees.
- 2.4.2. Contractor, Subordinate Parties and their personnel will be allowed to park in the Owner's parking area. Each Contractor is responsible for providing transportation to and from the site, if required.

- 2.5. **LOADING OF STRUCTURE:** Each Contractor on behalf of itself and its Subordinate Parties shall not load or permit any part of a structure to be loaded with a weight that will endanger its safety.
- 2.6. **USE OF OWNER'S EQUIPMENT:** Contractors and their Subordinate Parties will not be allowed to use any Owner tools or equipment during the course of the Project.
- 2.7. **USE OF EXISTING ELEVATORS**
 - 2.7.1. Contractor may subject to the approval of CM and Owner, use the existing elevator(s) designated by the Owner within the contract boundaries for movement of personnel and materials to a construction area.
 - 2.7.2. In those cases where an elevator is to be shared with Owner services, the Owner's employees and services take priority over construction activities.
 - 2.7.3. Contractor is responsible for proper conduct with regard to the use of the elevator. Any damage to the elevator due to oversize load, excess weight or other conditions is the individual Contractor's responsibility.
 - 2.7.4. Use of the elevator(s) at times other than normal working hours shall be coordinated with CM and Owner.
- 2.8. **USE OF EXISTING FACILITIES**
 - 2.8.1. Limit the usage of the occupied areas of the facility to that which is absolutely necessary for the installation of the Work. Parts of the facility not in the construction area are "off limits" unless a specific work task is being performed as designated by CM.
 - 2.8.2. Use of the Owner's cafeteria, parking, telephones, toilet facilities, tools, equipment, or any other item or facility belonging to the Owner is not allowed unless specifically authorized by Owner and CM.
 - 2.8.3. Restrict all Work activities associated within an area undergoing renovation to the boundaries indicated by the Contract Documents. Any means of access or egress from the stipulated boundaries shall be coordinated with CM and the Owner.
- 3 **WORK HOURS:**
 - 3.1. Normal working hours are; 7:00 AM to 3:30 PM, Monday through Friday.
 - 3.2. Work operations shall comply with all applicable laws, ordinances, and regulations, and not create a public nuisance nor disturb the peace.
 - 3.3. Compensation to CM for supervisory staff due to abnormal working hours will be at the requesting Contractor's expense.
 - 3.4. Whenever Contractor intends to depart from normal work hours, it shall notify CM in writing at least forty-eight (48) hours in advance. Failure of Contractor to give such timely notice may result in CM directing the removal or uncovering of the Work performed during such abnormal hours at Contractor's expense. Special arrangements can be made for emergency work or shutdowns as may be required.
 - 3.5. Required off-hours work:
 - 3.5.1. Contractors may be requested to work split shifts, weekends, off peak Owner loading periods, etc., to accommodate Owner's utility and service requirements, such as, but not limited to, medical gas systems, electrical power, HVAC systems, storm and sanitary lines.
 - 3.5.2. All Work shall be bid on a straight time basis. Should premium time be required by the Owner, the cost for premium time labor, which may be required, is the Contractor's responsibility and is to be included in the base bid.
- 4 **USE OF EXPLOSIVES:** Is NOT permitted.
- 5 **DUST, DIRT, NOISE:** Each Contractor shall effectively confine or eliminate dust, dirt and noise to the actual construction area and in compliance with all applicable laws, rules and regulations.

- 6 **BEHAVIOR AND CONDUCT:** The Owner and CM expect Contractors and their Subordinate Parties to exercise common sense and good judgment, and to conduct themselves in a manner which would be a credit to the Owner. Without limiting other applicable provisions of the Contract Documents, Contractor shall not engage in the following:
- 6.1. Conduct that interferes with Work or work of others.
 - 6.2. Conduct that interferes with or is detrimental to safety, well-being of the owner, their operations and/or good reputation.
 - 6.3. Unauthorized use of confidential information.
 - 6.4. Discourtesy toward Owner's staff, visitors and the general public (including abusive, vulgar or other language.)
 - 6.5. Soliciting, canvassing, posting, or distributing literature or materials for any purpose while on the job site.
 - 6.6. Disregard of safety, sanitation, or security laws, rules and regulations.
 - 6.7. Stealing.
 - 6.8. Gambling.
 - 6.9. Possession and/or use of narcotics or intoxicants.
 - 6.10. Threats or abuse of others.
 - 6.11. Disorderly conduct or fighting.
 - 6.12. Playing of loud music.
 - 6.13. Falsification of information.
 - 6.14. Unauthorized travel of Contractor's employees outside the designated project Work areas.
 - 6.15. Discriminating behavior.
 - 6.16. Possession and/or use of weapons or firearms.
 - 6.17. Sexual or Ethnic harassment.
 - 6.18. Smoking: Contractors and their Subordinate Parties shall be responsible for adhering to the smoking policies and regulations of the Owner and the Owner's facilities.
- 7 **TEMPORARY PARTITIONS:**
- 7.1. Partition construction shall provide a fire-resistant classification approved by the authorities having jurisdiction. Openings in such partitions shall be protected by fire doors consistent with the rating of the partition. Any trade creating penetrations through the temporary partitions shall fire stop openings to match the rating of the wall.
- 8 **PROTECTION OF FACILITIES**
- 8.1. Each Contractor on behalf of itself and its Subordinate Parties shall be responsible for all damage to the Project including the existing buildings and grounds arising or resulting from its operations under the Agreement. Repair or replacement of damaged items shall be to the satisfaction of the Owner and CM.
 - 8.2. Each Contractor shall provide and maintain proper shoring and bracing for existing underground and aboveground utilities, foundations, structure and systems encountered during its Work and shall
 - 8.2.1. protect the project, or any part thereof, and surrounding areas from collapse or movement, or any other type of damage until such time as they are to be removed, incorporated into the new Work or can be properly supported or backfilled upon completion of new Work.
 - 8.2.2. limit disruptions to a maximum of four (4) hours.

- 8.2.3. prior to beginning any Work that may affect underground facilities, contact MISS DIG and utility companies for the location of all existing underground services.
 - 8.2.3.1. Provide documentation of such contact to CM.
 - 8.2.3.2. If necessary, Contractor shall pay for layout and locating of existing utilities.
- 8.3. Utilities and/or other services which are shown, or not shown but encountered, shall be protected by the Contractor from any damage arising or resulting from Work, unless or until they are abandoned. If the utilities or services are damaged from Contractor's Work, Contractor shall immediately repair any damage and restore the utilities and services to an equal or better condition than that which existed prior to the damage. Contractor will be responsible for all liabilities, expenses, lawsuits or claims arising or resulting from such damage and will defend, hold harmless and indemnify Owner and CM from any claims or lawsuits or other expenses.
- 8.4. Each Contractor on behalf of itself and its Subordinate Parties shall be responsible for all damage to the Project and surrounding areas including the existing building and grounds arising out of or resulting from their performance of the Work. Repair or replacement of damaged items shall be to the satisfaction of the Owner and CM.
- 8.5. Preservation of existing trees and other vegetation on the site to the maximum extent possible is required.
 - 8.5.1. Each Contractor must plan its Work and instruct its Subordinate Parties to conduct their operations to avoid damage to trees and vegetation (provide barriers as required.)
 - 8.5.2. Indiscriminate driving about the site, disposing of waste, storage of materials upon or against trees or any other activity which is harmful to trees or vegetation will not be tolerated.
 - 8.5.3. Any case of damage to any tree shall be reported to CM immediately so that professional repairs can be made. The cost of such required repairs or treatment shall be charged to the responsible Contractor.

9 OWNER'S OPERATIONS & INTERRUPTION OF OCCUPANCY /SEQUENCING

- 9.1. The Owner shall have the option to curtail or delay any activity that affects its operations. Should a Contractor be asked to stop its Work, the Contractor shall do so immediately and proceed with other activities with no additional cost to the Owner or CM.
- 9.2. The Owner may occupy the premises during the entire period of construction to conduct operations.
- 9.3. Each Contractor is responsible to plan, coordinate and execute its Work in such a manner that there will be no disruption of or the least disruption to the Owner's operations. If an interruption of operations is unavoidable, then this Work will be scheduled with the Owner through CM.
- 9.4. Contractors is responsible to provide temporary utilities and systems to maintain services to the facility while Work is being performed.
- 9.5. No interruptions to Owner's power, lighting, signal, or alarm circuits will be permitted without the express written permission of the Owner through CM. Arrangements for interruptions shall be made with the Owner at least forty-eight (48) hours prior to the interruption and shall be made at such time and duration as authorized by them. Temporary feeders, transformer jumpers, connections, circuits, etc., shall be used as required to accomplish the above at no additional cost to the Owner and CM.

10 MATERIAL STORAGE

- 10.1. All Contractors are required to provide and pay for off-site storage facilities as required for their Work.
- 10.2. All Contractors will not be allowed on-site storage facilities. Material, equipment and tools, shall not be stored on-site in excess of five (5) working days prior to installation or use without CM's approval.
- 10.3. Storage of combustible materials within or adjacent to the building is prohibited.
- 10.4. All Contractors shall

- 10.4.1. Stock the job with sufficient materials to maintain progress and schedule and without interfering with the Work or storage of others.
- 10.4.2. Assume full responsibility for the protection and safekeeping of products under their control which are stored on the site.
- 10.4.3. Move any stored products under their control, which interfere with operations of the Owner or separate contractors as directed by CM.
- 10.4.4. Provide sufficient protection for its materials and equipment from damages by weather or construction work or other hazards.
- 10.4.5. Remove all debris and leave the area in a clean and orderly condition during progress of Work and upon completion of the Work.
- 10.4.6. Submit a receipt of shipment for all equipment stored on-site or off-site to CM. No materials or equipment shall be removed from the site without the permission of CM

END OF SECTION 01140

SECTION 01250 CHANGES IN THE WORK

1 SUMMARY

1.01 This section describes the following requirements including:

1.01.1 Types of Change Documentation

1.01.1.1 PCO – Potential Change Order

1.01.1.2 CO – Change Order

1.01.2 Compensation of Overhead and Profit for Changes in the Work

1.01.3 Itemization of Cost of Changed Work

1.02 This section is not intended to include RFI's, ASI's (Architects Supplemental Instructions), or other documents that clarify the work but have no substantive cost or schedule impact to the work.

2 TYPES OF CHANGE DOCUMENTATION

Changes to the work which may involve a change in the contract price or schedule will be accompanied by the Barton Malow form entitled "PCO- Quotation Only". In the event that the timing does not allow the For Quote Only process, then CM will issue its form entitled "PCO-Notice to Proceed. "

2.1. PCO- NOTICE TO PROCEED AND FOR PCO- QUOTATION ONLY FORMS

- 2.1.1. A PCO- Notice to Proceed is used when Work must be performed with swiftness and authorization to proceed by Change Order is inappropriate due to time restrictions. In order for a PCO- Notice to Proceed to be valid, it must be signed by CM. The terms for establishing the additional cost and processing of the PCO- Notice to Proceed into a Change Order shall be identified prior to its release by CM.
- 2.1.2. If a change results in a change in cost, CM will issue a PCO with the supporting change documents.
- 2.1.3. Contractor shall prepare a detailed cost quotation for the PCO. This quotation shall include an itemized takeoff of labor, equipment and material with a unit cost for each item together with backup and breakdown documentations satisfactory to CM. The PCO must be returned as directed
- 2.1.4. Contractor shall sign and date the PCO and submit it with proper backup. The PCO will then be reviewed, evaluated, negotiated and then, when acceptable, processed
- 2.1.5. The PCO- Quotation Only is a document used for processing Contractor's quotations and is **not** a Change Order. Therefore, completion of the PCO- Quotation Only does **not** release the Work to begin.
- 2.1.6. PCO's will precede a Change Order. Contractors shall receive an approved PCO- Notice to Proceed or an executed Change Order before starting Work. Any changed Work performed by Contractor without a properly executed PCO- Notice to Proceed or a properly executed Change Order is at Contractor's sole risk and expense. BILLINGS AGAINST CHANGES WILL NOT BE ACCEPTED AFTER A PCO- NOTICE TO PROCEED OR FOR QUOTE ONLY IS ISSUED, BUT ONLY AFTER A CHANGE ORDER HAS BEEN PROCESSED AND SIGNED BY ALL PARTIES.

2.2. CHANGE ORDER

- 2.2.1. Change Orders will be issued by CM. CM will first issue the Change Order to the Contractor for signature. The Change Order will then be returned to CM. Once all appropriate signatures are secured, an executed copy will be sent to the Contractor.
- 2.2.2. Once the Change Order has been processed and signed by all parties, the Contractor may invoice for payment on the completed portion of Work.
- 2.2.3. Agreement on a Change Order shall constitute a final settlement of all matters relating to the changed Work that is the subject of the Change Order.

3. COMPENSATION OF OVERHEAD AND PROFIT FOR CHANGES IN THE WORK

3.1. CONTRACTOR'S OVERHEAD AND PROFIT

- 3.1.1. For changes resulting in increase of cost:
 - 3.1.1.1. Overhead and profit for the Contractor shall not exceed the following when change Work is performed by
 - 3.1.1.1.1. Contractor itself: fifteen percent (15%).
 - 3.1.1.1.2. Contractor subordinate party: five percent (5%)
 - 3.1.1.2. Overhead and profit for the subordinate party shall not exceed the following when change Work is performed by
 - 3.1.1.2.1. Subordinate party itself: fifteen percent (15%)
 - 3.1.1.2.2. Contractor to the subordinate party: five percent (5%)
- 3.1.2. For changes resulting in reduction of cost
 - 3.1.2.1. Deductive costs shall include commensurate deductive credits for overhead and profit based on the percentages stated above.
- 3.1.3. Contractor's and Subordinate Party's overhead and profit shall include cost (at the Project Site, home office and otherwise) of supervision, telephone, travel, copying, administrative services, office, power, light, tools, jobsite vehicles, and all other general expenses including bond premiums. In no event shall these items be charged as cost of the Changed Work.

4. ITEMIZATION OF COST OF CHANGED WORK

4.1. EXTRA WORK TICKETS

- 4.1.1. If extra work is to be completed above and beyond the terms of the contract, as determined by (and approved in advance by) the CM, the Contractor is required to:
 - 4.1.1.1. Provide an Extra Work Order ticket to the CM within three (3) days of completing the work.
 - 4.1.1.1.1. Extra Work Order tickets will be rejected if they are not turned in to the CM within three (3) days of completing the work.
 - 4.1.1.1.2. Extra Work Order tickets are to be completed in triplicate and a copy is to be left with the CM.
 - 4.1.1.1.2.1. The CM will sign all copies of the Extra Work Order tickets and return two (2) to the Contractor in a prompt manner, keeping one for record.
 - 4.1.1.1.3. A copy of the signed ticket(s) must accompany the Request for Change Order(s) quote from the Contractor. A change order will not be processed and the Request for Change Order(s) will be rejected if there is no signature from the CM.

4.1.1.2. Provide the CM with a Request for Change Order for the extra work within ten (10) days of receiving the signed ticket.

4.1.1.2.1. The Request for Change Order must be accompanied by a copy of the signed Extra Work Order ticket from the Contractor.

4.1.1.2.2. The Request for Change Order will be rejected and no PCO or Change Order will not be processed if the quote is not received within ten (10) days of the date signed by the CM.

4.2. CORRELATION WITH CONTRACTOR'S SUBMITTALS

4.2.1. Contractors shall

4.2.1.1. Revise the Schedule of Values and Request for Payment forms to record each Change Order as a separate item of Work, and to record the adjusted contract price.

4.2.1.2. Revise the Construction Schedule to reflect each change in Contract Time approved by a Change Order.

4.2.1.3. Revise sub-schedules to show changes for other items of Work affected by the changes.

4.2.1.4. Enter and revise Record Documents to reflect changes

4.3. COST OF THE CHANGED WORK

4.3.1. The "Cost of the Changed Work" shall be approved by CM and shall mean the costs necessarily incurred by the Contractor in the proper performance of the Changed Work. Such rates shall not be higher than those customarily paid at the place of the Project. The Cost of the Changed Work shall only include those items set forth below.

WAGES OF LABOR	Wages of construction workers directly employed by Contractor to perform the construction of the changed Work at the site
PAYROLL MARKUP	The amount approved by CM and Owner which covers the costs paid by the Contractor for taxes, insurance, contributions, assessments, and benefits required by law or collective bargaining agreements and for personnel not covered by such agreements, customary benefits such as sick leave, medical and health benefits, holidays vacations and pensions, provided that such costs are based on the wages and salaries of labor performing the changed Work.
COST OF EQUIPMENT, MATERIALS, AND SUPPLIES	Costs of materials, equipment and supplies to be incorporated into the changed Work less all savings, discounts, rebates and credits accruing to the Contractor.
RENTAL CHARGES FOR EQUIPMENT NOT OWNED BY CONTRACTOR	Rental charges for equipment not owned by Contractor that is necessary for completion of the Changed Work. Rates and quantities rented must be approved in advance by CM.
TAXES	Sales or use taxes imposed by a governmental authority which are directly attributable to the changed Work and for which the Contractor is liable.
SUBORDINATE PARTY COSTS	Payments made to the Contractors for proper execution of Changed Work, subject to the limits set forth above for overhead and profit.

4.2.2. In no event shall the Cost of Changed Work include:

- 4.2.2.1. Salaries or wages of persons other than those directly performing the changed Work, including Contractor's personnel stationed at the principal office;
- 4.2.2.2. Expenses of the Contractor's principal office and offices other than the site office, except as provided above;
- 4.2.2.3. Overhead and general expenses of any nature, except as set forth above;
- 4.2.2.4. Capital expenses of Contractor, including interest on the Contractor's capital employed for the Changed Work;
- 4.2.2.5. Rental costs for machinery or equipment, except as allowed above, or tools of any kind, unless specifically identified and approved in advance in writing by CM;
- 4.2.2.6. Costs due to the negligence or failure to perform of the Contractor or its Subordinate Parties;
- 4.2.2.7. Costs designated above as being included in Overhead and Profit
- 4.2.2.8. Any cost not specifically described above, or otherwise approved in advance and in writing by CM and Owner.
- 4.2.2.9.** Any bond premiums of portion of increased bond costs directly attributable to the changed Work.

4.3. QUOTATION FORMAT

Based on the above, the following formula will be utilized by all of the Contractors.

Number of PCO _____

Date of PCO _____

Description of Change _____

Cost of Changed Work

Labor:

Carpenter	(No. of Hrs. x Rate)	xxx.xx	
Labor	(No. of Hrs. x Rate)	xxx.xx	
Ironworker	(No. of Hrs. x Rate)	<u>xxx.xx</u>	
	Subtotal		xxx.xx
	OH&P @ 15%		xxx.xx

Equipment, Materials, Supplies:

Ace Hardware	xxx.xx		
Acme Products	xxx.xx		
Concrete Supplier		<u>xxx.xx</u>	
		xxx.xx	
	Subtotal		xxx.xx
	OH&P @ 15 %		<u>xxx.xx</u>
	Subtotal (1)		xxx.xx

Contractor Costs

ABC Welding	xxx.xx		
XYZ Resteel		<u>xxx.xx</u>	
	Subtotal		xxx.xx
	OH&P @ 5 %		<u>xxx.xx</u>
	Subtotal (2)		xxx.xx

TOTAL QUOTATION AMOUNT

Total Quotation (Subtotal 1 plus Subtotal 2)

XXX.XX

END OF SECTION 01250

SECTION 01290 PAYMENT PROCEDURES

1. SUMMARY

1.1. This Section describes the following requirements including:

- 1.1.1. Schedule of Values
- 1.1.2. Application for Payment Process
- 1.1.3. Reduction of Retention
- 1.1.4. Payment for Materials Stored Off-site
- 1.1.5. Waivers of Lien and Sworn Statements

2. PAYMENT PROCEDURES

2.1. SCHEDULE OF VALUES

- 2.1.1. Once the Agreement is awarded, each Contractor must submit a Schedule of Values for its entire Work to CM for approval. This Schedule of Values must be submitted either within fifteen (15) days of award or fifteen (15) days prior to the first payment application deadline (per the Application for Payment Schedule), whichever comes first. The Schedule of Values must include labor and material line items for each portion of the Work (larger portions of Work such as concrete, curtainwall, drywall, mechanical, and electrical shall be broken down by elevation, floor, and areas appropriate), the Contractor shall separate bond costs, and general conditions line items as appropriate.
- 2.1.2. The Schedule of Values will be submitted in a format as prescribed by, and to the level of detail specified by, CM.
 - 2.1.2.1. The sum of the parts of the Schedule of Values shall equal the contract price.
 - 2.1.2.2. The minimum level of breakdown and order on the application for payment will be:
 - 2.1.2.2.1. Bond costs, if applicable
 - 2.1.2.2.2. General conditions line item(s)
 - 2.1.2.2.3. Division 1 cost breakdown as required
 - 2.1.2.2.4. Costs associated with preparation of closeout paperwork and documentation
 - 2.1.2.2.5. Major portions of the Work shall be broken down into labor and material line items for specific areas of the facility
 - 2.1.2.2.6. A listing of approved and executed Change Orders to the Contract, if any, in sequential order.
 - 2.1.2.3. Schedule of Values items shall have a direct and understandable relation to the Project master construction schedule.
 - 2.1.2.4. Overhead and profit shall be listed as a separate line item on the schedule of values.
- 2.1.3. The Schedule of Values, unless objected to by CM, Owner or Architect, shall be the basis for the Contractor's application for payments.
- 2.1.4. CM shall have the right to require the Contractor to alter the value or add/delete categories listed on the Schedule of Values at any time for the following reasons:
 - 2.1.4.1. The Schedule of Values appears to be incorrect or unbalanced.

- 2.1.4.2. A revision of the Schedule of Values is required due to the Contractor revising the sequence of construction or assembly of building components that in turn invalidates the Schedule of Values.
- 2.1.4.3. Change Orders are issued to the Contractor and shall be incorporated into the Schedule of Values as a separate line item at the bottom of the Schedule of Values.
- 2.1.5. The Contractor is required to correlate the documentation for payment of stored materials requested in the application for payment against the agreed upon breakdown of the Schedule of Values as described in Payment for Stored Materials. CM reserves the right to not process the application for payment if this correlation has not been submitted in conjunction with the application.

2.2. APPLICATION FOR PAYMENT PROCESS

2.2.1. Step 1: JOB-SITE INSPECTION - DRAFT PAYMENT REQUEST

- 2.2.1.1. The Contractor shall
 - 2.2.1.1.1. have a representative walk the Project site with CM's representative on or before the tenth (10th) of the month,
 - 2.2.1.1.2. invoice for Work from the tenth (10th) of last month to the tenth (10th) of the present month.
 - 2.2.1.1.3. submit during the review, the itemized rough draft of the Application and Certificate for Payment (AIA Documents G702 and G703 Continuation Sheet) identifying the Work completed, if any, during the current calendar month; shall review same with CM and obtain a preliminary approved copy of the draft for official submission
 - 2.2.1.1.4. Contractor's pay application shall only reflect Work completed through the date of submission. In no event will payments be authorized for forecasted Work.

NOTE: No payment shall be issued to a Contractor for materials stored off-site unless supported by proper documentation as required by CM (upon advance notification of such requests only) as described in Part 3 Payment for Stored Materials.

2.2.2. Step 2: PAYMENT REQUEST PREPARATION/SUBMISSION

- 2.2.2.1. With the information agreed upon in Step 1, the Contractor will prepare a formal application for payment request.
- 2.2.2.2. Final electronic copies are due to CM on or before the fifteenth (15th) of the month.
- 2.2.2.3. Late or incomplete application packets will not be accepted.**
- 2.2.2.4. The payment request will be made on an Application and Certificate for Payment form (AIA documents G702 and G703).
- 2.2.2.5. Before submitting these documents to CM, each request for payment must be signed by a duly authorized agent of the Contractor and notarized.
- 2.2.2.6. The Contractor must include with each request for progress payment a waiver of lien for all previous payments, Contractor's sworn statement and any necessary backup data as described in Part 4, Waivers of Lien and Sworn Statements.
- 2.2.2.7. In addition, at submission of the final pay application Contractor shall provide unconditional final waivers of lien for all Subordinate Parties, as well as all close out documentation and all additional back up data described in Part 4, Waivers of Lien and Sworn Statements.
- 2.2.2.8. In requests for payment which follow the execution of a Change Order in excess of twenty-five percent (25%) of the Agreement price, Contractor must present a bond

rider evidencing that the penal sum of any required payment and performance bonds have been increased to one hundred percent (100%) of the adjusted Agreement price, or such other percentage as set forth in Section 00200 of the Project Manual, Instructions to Bidders. Submission of the required back-up data is a condition precedent to payment.

2.2.3. Step 3: CHECK DISTRIBUTION

2.2.3.1. CM will issue individual checks to each Contractor. The Contractor will receive the waiver of lien with the check and will be required to sign three (3) originals of the waiver upon receipt of the check each month (see Part 4).

2.2.3.2. The Contractor shall provide all supporting documentation substantiating the Contractor's right to payment as the Owner, CM and the Architect may require.

2.3. REDUCTION OF RETENTION

2.3.1. CM shall be entitled to withhold ten (10%) percent of each payment due to a Contractor until Substantial Completion of the Contractor's Work.

2.3.2. The Contractor, when requesting a reduction of retention, shall submit to CM, an AIA G707, Consent of Surety to Reduction In or Partial Release of Retention form in Section 01600 Forms.

2.3.3. Within thirty (30) days after Certificate of Substantial Completion has been issued for all portions of its Work, the Contractor's retention may be reduced to a sum as CM/the Architect may determine is suitable to protect CM and the Owner for all incomplete Work and any unsettled claims.

2.3.4. Notwithstanding the foregoing, payment of retention shall be subject to all other conditions precedent that applies to payment as set forth in the Contract Documents.

3. PAYMENT FOR MATERIALS STORED OFF-SITE

3.1. PAYMENT FOR MATERIALS STORED OFF-SITE

3.1.1. The Contractor, if intending to use an off-site storage area or facility for stored materials, shall submit a written request to the CM and obtain approval prior to submitting the first application for payment as described in Part 2 Applications for Payment.

3.1.2. Payments will be made for materials properly stored off site.

3.1.2.1. "Properly stored" shall mean in an insured warehouse with the Owner and CM being named as insureds, and all material identified as property of the Owner.

3.1.2.2. The Contractor is responsible for all associated off site storage costs, transportation, insurance, including insurance coverage for stored material, while in transit, unless Contractor obtains written documentation that the material is covered during transit under a Builder's Risk Policy applicable to the Project.

3.1.2.3. Contractor shall provide CM and the Owner verification in writing for all material so stored. Such materials shall be protected from diversion, destruction, theft, and damage to the satisfaction of CM, Owner and the Lender (if any), specifically marked for use on the Project, and segregated from other materials at the storage facility.

3.1.2.4. The Contractor bears all risk of loss to materials and equipment stored off site.

3.1.3. Contractor is to provide supporting documentation in the form of invoices, insurance policies, and any other pertinent documentation as requested by CM or Owner for items the items stored off-site. Documentation shall include the following:

3.1.3.1. Detailed description of the material including quantities that will serve as a material description for the billing and as information to file a claim with an insurance company.

- 3.1.3.1.1. Stored Materials - Each item must be identified as to manufacturer, model number, and serial number, if applicable, or other identifiers should be listed for each item. Each listing must be accompanied by invoices, shipping tickets, consent of surety, and any other applicable supporting documentation.
- 3.1.3.1.2. Stored Manufactured Building Materials - Each item must be identified as to type, manufacturer's number or designation, and should also list the number of cartons and the contents therein storage. Each listing must also be accompanied by supporting documents including all invoices, shipping tickets and consent of surety.
- 3.1.3.1.3. Stored Fabricated Materials - A listing specifying the number of pieces, items, and marks as may be applicable to the particular type of items. Photographs should accompany the request.
- 3.1.3.2. Individual itemized costs of materials and the total cost value, which shall not exceed the Contractor's subcontractor or material supplier cost. The total cost value shall be supported by the Contractor's subcontractor or material supplier invoices for the stored material.
- 3.1.3.3. Estimated cost value for those materials that are fabricated by the Contractor's subcontractor or material supplier.
- 3.1.3.4. The location where the material is physically stored, including the warehouse address and storage location within the warehouse, such as bin number, aisle number or other designation. All material shall be segregated and marked.
- 3.1.3.5. Copies of the insurance policies that cover the stored materials and that name CM and the Owner as insureds. The limit of the insurance policy shall be equal to or greater than the replacement value of the stored materials.
- 3.1.4. When Applications for Payment include products stored off the Project Site or stored on the Project Site but not incorporated in the Project, for which no previous payment has been requested, a complete description of such product shall be attached to the application.
- 3.1.5. Contractor shall submit a certificate of title listing the Owner's ownership in the off-site stored materials equal to the amount paid effective at the time funds are delivered.
- 3.1.6. If the size, quantity, and/or type of material or product is such that a bonded warehouse is deemed unsuitable, then, with CM's approval, the Contractor may elect to prepay its subcontractor or supplier for certain material and products which are to remain on and be stored on that subcontractor/supplier's premises until needed by the Project. In such event, the Contractor shall enter into a security agreement with the subcontractor/supplier under which the Contractor shall be granted a security interest in and to all such material and products fabricated and/or to be supplied by the subcontractor/supplier for this Project and stored on the subcontractor/supplier's premises. This Security Agreement shall be a part of the financing statement, which shall be presented to a filing officer for filing pursuant to the Uniform Commercial Code. All expenses incurred in obtaining this security agreement shall be at Contractor's sole cost and expenses, and shall not accrue to the Owner, CM, Architect, nor the Project. A copy of each and every security agreement shall be filed with CM with the first Application for Payment which requests payment for such material or products.
- 3.1.7. All payment requests for off-site stored materials must be accompanied using the "Payment Request for Stored Materials" and a "Subcontractor Affidavit for Stored Materials." Payment requests for stored materials not complying with the foregoing requirements will not be approved. Contractors are to notify the CM in ample time to conduct verification procedures.
- 3.1.8. Contractors may not apply the cost of materials stored off-site towards a reduction in the retention amount.

- 3.1.9. Representatives of CM and Owner shall have the right to make inspections of the storage areas at any time.

4. WAIVERS OF LIEN AND SWORN STATEMENTS

4.1. WAIVERS OF LIEN

- 4.1.1. The Contractor's first Application for Payment will be based upon 100 percent of the value of Work installed. The first payment, amounting up to 90 percent of application, will be made to the Contractor without supporting documentation. Subsequent Applications for Payment must be accompanied by lien waivers from the Contractor, its Subordinate Parties or receipted invoices covering payment to the Contractor for previous calendar month period. Lien waivers must be unconditional and must show the amount paid.
- 4.1.2. An "Acknowledgment of Payment and Partial Unconditional Release" will be distributed with the check to each Contractor by CM for payment of the previous month's application. The Waiver of Lien is to be signed by an authorized representative of the Contractor. Under no circumstances will payment be released until the completed "Acknowledgment of Payment and Partial Unconditional Release" has been submitted and signed by the Contractor from the previous month.
- 4.1.3. Final payment will not be made until a "Final Release Subcontractor/Materialman has been submitted. This will also be distributed by the CM for Contractor signature and must be returned by the Contractor. The Final Release must be signed by an authorized representative of the Contractor and must be notarized.
- 4.1.4. Final unconditional waivers will be required for all of Contractor's Subordinate Parties listed on Contractor's sworn statement. These final waivers must be submitted along with the final release, before payment can be made.

4.2. SWORN STATEMENTS

- 4.2.1. The appropriate number of original "Sworn Statements" must be completed to the satisfaction of CM, signed and notarized by an authorized representative of the Contractor and submitted with the Contractor's Application for Payment, monthly to the CM.
- 4.2.2. The Contractor's Subcontractor's sworn statements, waivers and other supporting documentation will be required with each pay application.

END OF SECTION 01290

SECTION 01310 MEETINGS

1. GENERAL

1.1. DESCRIPTION OF REQUIREMENTS

- 1.1.1. The CM shall schedule, chair, and administer all periodic meetings throughout the progress of the work for the purpose of coordinating and expediting the Work. Such meetings shall be held at the job site bringing together responsible representatives of active Contractors for the purpose of planning, assessing progress and discussing problems of mutual concern. Each Contractor, and its Subordinate Parties' representative attending the meetings shall be authorized to act on behalf of and make decisions/commitments for the entity each represents, the decisions made at the meetings and each Contractor who should be in attendance will be held responsible for information and directions given at the meeting.
- 1.1.2. The CM will prepare and distribute the minutes of all meetings, if CM determines minutes are required. If the attendees do not object in writing to any part of the meetings within ten (10) days of distribution of the minutes, the minutes shall be accepted as written.
- 1.1.3. The scope of meetings include, but are not limited to:
 - 1.1.3.1. Preconstruction Meeting
 - 1.1.3.2. Job Progress/Coordination Meetings
 - 1.1.3.3. Other Meetings

2. TYPES OF MEETINGS

2.1. PRECONSTRUCTION MEETING (KICK-OFF)

- 2.1.1. A Preconstruction (kick-off) meeting will be conducted with representatives of all the Contractors within fifteen (15) days after the Agreement is awarded at the jobsite or as designated by the CM. The agenda may include:
 - 2.1.1.1. Discussion on major subcontracts and suppliers
 - 2.1.1.2. Major and/or critical work sequencing regarding the project schedule
 - 2.1.1.3. Project coordination and designation of responsible personnel
 - 2.1.1.4. Procedures and processing of field instructions, requests for proposal, submittals, change orders, applications for payment, etc.
 - 2.1.1.5. Quality assurance/control issues
 - 2.1.1.6. Adequacy of distribution of contract documents
 - 2.1.1.7. Procedures for maintaining record documents
 - 2.1.1.8. Use of premises, office, work and storage areas and other CM requirements
 - 2.1.1.9. Construction facilities/temporary utilities
 - 2.1.1.10. Safety and security procedures
 - 2.1.1.11. Other administrative procedures
 - 2.1.1.12. Review of Owner expectations

2.2. JOB PROGRESS/COORDINATION MEETINGS

- 2.2.1. On-site project coordination/progress meetings will be held on a bi-weekly basis or as appropriate throughout the life of the Project. The [CM/Owner] will set the agenda for the Project progress meeting. At a minimum, each Contractor shall be prepared to discuss the following:
 - 2.2.1.1. Actual vs. scheduled progress for the prior two-week period

- 2.2.1.2. Planned construction activities for the next four weeks
- 2.2.1.3. Problems with, revisions to and corrective measures and procedures to regain the construction schedule, if required
- 2.2.1.4. Review of off-site fabrication, delivery schedules
- 2.2.1.5. Document clarification requests
- 2.2.1.6. Coordination items with other Contractors
- 2.2.1.7. Changes in the work affecting cost and/or time
- 2.2.1.8. Submittals and shop drawings
- 2.2.1.9. Field observations, problems, conflicts
- 2.2.1.10. Quality control issues and non-conformance resolutions
- 2.2.1.11. Safety issues

2.3. OTHER MEETINGS

- 2.3.1. QUALITY ASSURANCE MEETINGS - CM may conduct quality assurance/quality control meetings as necessary during the progress of the Work. CM will set the agenda for the quality meeting. At a minimum, the Contractor shall be prepared to discuss the following:
 - 2.3.1.1. Testing and inspection procedures
 - 2.3.1.2. Tolerance requirements
 - 2.3.1.3. Quality samples
 - 2.3.1.4. Reporting of non-conformance items
 - 2.3.1.5. Corrective actions assigned
 - 2.3.1.6. Disposal of non-conforming items
 - 2.3.1.7. Job procedures
- 2.3.2. SAFETY MEETINGS - Refer to Section 00810 Safety and Loss Control Program for more information.
- 2.3.3. INSPECTIONS TOURS - Formal inspections/tours may be made of the Project progress by the Owner, Architect, local, state or federal officials, insurance representatives, or others as the occasion warrants and as scheduled by CM. If requested by CM, each Contractor shall be prepared to show and explain Work throughout the building to the inspecting parties, in addition to providing Work in compliance with these inspections.
- 2.3.4. CHANGE REQUEST MEETINGS - Upon issuance of a major Proposal Request (a.k.a. bulletin), CM may conduct a meeting as necessary with all significant Contractors to review its contents and determine cost, delivery and schedule impacts. At a minimum, the Contractor shall be prepared to discuss the following:
 - 2.3.4.1. Impact of out-of-sequence work
 - 2.3.4.2. Identification of pertinent long-lead material and system impact
 - 2.3.4.3. Alternative recommendations
 - 2.3.4.4. Evaluation of approximate cost magnitude
 - 2.3.4.5. Evaluation of impact on completion
 - 2.3.4.6. Alternate sequencing
 - 2.3.4.7. Due date for Contractor pricing and scheduling impact

END OF SECTION 01310

SECTION 01320 COMMUNICATIONS

1. SUMMARY

1.1. This Section describes the following requirements including:

- 1.1.1. Meetings / Communications
- 1.1.2. Contractor Correspondence
- 1.1.3. Contractor's Daily Report
- 1.1.4. Request for Information (RFI)

2. METHODS OF COMMUNICATION

2.1. MEETINGS (previous Section 01310 – Meetings)

- 2.1.1. The CM shall schedule, chair, and administer all periodic meetings throughout the progress of the work for the purpose of coordinating and expediting the Work. Such meetings shall be held at the job site office bringing together responsible representatives of active Contractors for the purpose of planning, assessing progress and discussing problems of mutual concern. Each Contractor, and its Subordinate Parties' representative attending the meetings shall be authorized to act on behalf of and make decisions/commitments for the entity each represents, the decisions made at the meetings and each Contractor who should be in attendance will be held responsible for information and directions given at the meeting.
- 2.1.2. The CM will prepare and distribute the minutes of all meetings, if CM determines minutes are required. If the attendees do not object in writing to any part of the meetings within ten (10) days of distribution of the minutes, the minutes shall be accepted as written.
- 2.1.3. The scope of meetings include, but are not limited to:
 - 2.1.3.1. Preconstruction Meeting
 - 2.1.3.2. Job Progress/Coordination Meetings
 - 2.1.3.3. Other Meetings
 - 2.1.3.3.1. Quality Assurance
 - 2.1.3.3.2. Safety
 - 2.1.3.3.3. Inspection Tours
 - 2.1.3.3.4. Change Request

2.2. CONTRACTOR CORRESPONDENCE

- 2.2.1. All field and/or construction correspondence and/or communications must be directed through CM. All correspondence should list the following as appropriate:
 - 2.2.1.1. Project Name: **Troy School District – 2013 Bond Program – BP#25**
 - 2.2.1.2. CM Job#: 140077
 - 2.2.1.3. Architect Job#:
 - 2.2.1.4. Contractor Contact Information
 - 2.2.1.5. Subject: Clearly indicate subject matter of correspondence

2.3. CONTRACTOR'S DAILY REPORT

- 2.3.1. Each Contractor will prepare and distribute daily to CM a comprehensive daily report to include pre-task planning and maintain it during the entire project period. The daily report shall be

submitted to CM's superintendent by the end of the day for that day's Work. Each Contractor is responsible for specifically alerting CM to items which could result in claims or delays.

- 2.3.2. Each Contractor may provide its own daily report if it covers the same issues as addressed in CM's Contractor Daily Report / Pre-Task Plan form. The CM suggested report form will be provided to the Contractor and is in Section 01600 - Forms.

2.4. REQUEST FOR INFORMATION (RFI)

- 2.4.1. The Request for Information (RFI) is in Section 01600 Forms.
- 2.4.2. In the event that a clarification is required due to a question raised by the Contractor pertaining to the Contract Documents, the Contractor shall submit a Request for Information (RFI) to the CM, which will be forwarded to the Architect. The RFI should be sufficiently detailed to accurately describe the problem and provide a possible solution.
- 2.4.3. The Architect will return the RFI to CM as expeditiously as possible with its reply. In some instances, the Architect may issue its reply to the RFI on other documents, in which case, the RFI will simply reference these documents.
- 2.4.4. The RFI will be returned to the Contractor by CM. The Contractor is responsible to give proper notice as set forth in the Contract Documents if a response will cause the Contractor to incur additional expense or expend additional time which could impact the schedule. If extra work or an additional cost may exist due to the clarification, CM may issue a PCO- Quotation Only or PCO-Notice to Proceed to the Contractor.

END OF SECTION 01320

SECTION 01330 SUBMITTALS

1 SUMMARY

1.1. This Section describes the following requirements including:

- 1.1.1. Scope
- 1.1.2. Submittal Register
- 1.1.3. Submittal Requirements
- 1.1.4. Submittal Process and Responsibilities
- 1.1.5. Re-submission Requirements

2 SCOPE

- 2.01 Where requirements of this Section vary from the requirements of the General Conditions, this Section's requirements shall take precedence.
- 2.02 CM will prepare and submit a submittal register/schedule including close-out documentation for Contractor's use in preparing submittals required for the Project. Contractors shall complete the submittal schedule/register showing the dates for submission, lead times required and their expected delivery dates to maintain and follow the construction schedule. Dates for submission noted by Contractor must assume re-submittals will be required. Submittals received on the date scheduled will be processed as specified. CM/Owner/Architect will not be held responsible for delays due to receiving submittals after the date indicated in the Contractor's submittal schedule.
- 2.03 Submittals shall be submitted based on each technical specification section. Submittals containing information about more than one specification section will be returned for re-submittal.
- 2.04 Contractor is responsible to provide all submittals required under the Contract Documents, whether or not listed in the submittal register.
- 2.05 Furnish approved copies of shop drawings, diagrams, templates, catalog cuts, technical data, etc. to others for the purposes of coordination of this Work.
- 2.06 Coordination: Each Contractor shall coordinate preparation and processing of submittals with performance of construction activities. Transmit each submittal sufficiently in advance of performance of related construction activities to avoid delay.
 - 2.06.1 The Contractor, by providing the submittal assures the product or system submitted is available and deliverable in accordance with the schedule requirements.
 - 2.06.2 Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals and related activities that require sequential activity.
 - 2.06.3 Coordinate transmittal of different types of submittals for related elements of the Work so processing will not be delayed by the need to review submittals concurrently for coordination.
 - 2.06.4 CM reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.
 - 2.06.5 Coordinate each submittal as required with all trades and with all public agencies involved.
 - 2.06.6 Secure all necessary approvals from public agencies and others; signify by stamp or other means that all required approvals have been obtained.
 - 2.06.7 Material Compliance Certificate:
 - 2.06.7.1 The following forms are available upon request from the CM:
 - 2.06.7.1.1 Material Compliance Certificate
 - 2.06.7.1.2 Approved Submittal List for Material Compliance Certificate Use

- 2.06.7.2 Contractors may choose to complete the *Material Compliance Certificate* form which will serve as the Contractor's official submittal document and must meet all general submittal requirements. Only approved submittals listed on the *Approved Submittal List for Material Compliance Certificate Use*, prepared by CM, will be reviewed in this format.
- 2.06.7.3 Items available to utilize the Material Compliance Certificate can include a submittal that establishes a level of quality by complying with the manufacturer and manufacturer's designated identifier as called for in the Contract Documents. The Contractor is committed to using this exact specified component. This Certificate is contractually binding.
- 2.06.7.4 This form can be used for multiple submittal items. The Architect/Engineer will review and approve the Material Compliance Certificate in the same manner as a standard submittal.
- 2.06.7.5 In the event additional information would be required after submission and/or approval of the Material Compliance Certificate, the Contractor must provide this information promptly through the standard revision process.

3. SUBMITTAL REQUIREMENTS

3.1. GENERAL

- 3.1.1. Each submittal shall show Contractor's review stamp, with handwritten signature, certifying review of the submittal, verification of field measurements and compliance with the Contract Documents.
- 3.1.2. Each submittal shall be accompanied with a Submittal Transmittal Form. The following information shall be furnished by the Contractor on the submittal transmittal form:
 - 3.1.2.1. Original Date of submission and Revision Date(s).
 - 3.1.2.2. Project name and Architect's and the CM's project number
 - 3.1.2.3. Names of:
 - 3.1.2.3.1. Contractor
 - 3.1.2.3.2. Second-Tier Contractor (if applicable)
 - 3.1.2.3.3. Supplier
 - 3.1.2.3.4. Manufacturer
 - 3.1.2.4. Identification of product or material
 - 3.1.2.5. Technical Section number, clearly identified. On multiple submittals, a separate transmittal should be completed for each specification section on items being submitted.
 - 3.1.2.6. Reference to construction drawings by drawing number
 - 3.1.2.7. The quantity of each Shop Drawing, Product Data or Sample submitted
 - 3.1.2.8. Notification of deviations from Contract Documents
 - 3.1.2.9. For Shop Drawings, show relationship to adjacent structure or materials
 - 3.1.2.10. For Shop Drawings, show field dimensions, clearly stated as such.
 - 3.1.2.11. Applicable standards such as ASTM or Federal Specifications.
 - 3.1.2.12. Other pertinent data
 - 3.1.2.13. Submittals not so transmitted will be returned un-reviewed. Re-submissions shall be so noted on the transmittal.

3.1.3. Unless noted otherwise on the submittal, all submissions will be considered to be "as specified."

3.2. REQUIRED QUANTITIES OF SUBMITTALS (ELECTRONIC REVIEW VERSION)

3.3.1. In general, all submittals, except color or physical samples, are to be posted electronically in PDF document form for CM and the Architect/Engineer to electronically review and approve. CM will use Submittal Exchange as a posting site for the facilitation of this review and approval process. The following number of originals and copies will be required for each type of submittal.

Submittal Type:	Required submit quantities:	
	Electronic ¹	Other
.1 Shop Drawings – Structural Steel and all MEP	1	
.2 Shop Drawings – all other	1	
.3 Product Data – Structural Steel and all MEP	1	
.4 Product Data – all other	1	
.5 Samples	1	4
.6 Certificates ²	1	
.7 Warranties / Guarantees ²	1	
.8 Test Reports ²	1	
.9 Close-Out Material: O & M Data ²	1	
NOTES : ¹ ALL electronic submittals shall be in PDF format ² Items #6-9 above are to be submitted together as part of the Close-Out Packet when requested by CM		

3.3.2. All submittals will be reviewed electronically via Submittal Exchange, and an electronic submittal transmittal is required. Reviewed versions will be posted back to Submittal Exchange. CM will notify Contractor of the posting and availability for Contractor to download the reviewed version. Paper copies will not be returned to the Contractor.

4. TYPES OF SUBMITTALS

4.1. SHOP DRAWINGS

- 4.1.1. Provide Shop Drawings as complete submittals (no partial sets) on original drawings or information prepared solely by the fabricator or supplier. In no instance shall the Contract Drawings be reproduced for Shop Drawing submittals.
- 4.1.2. Sheet sizes shall not exceed the size of the Contract Drawings or smaller than 8-1/2" X 11".
- 4.1.3. Each drawing shall have blank spaces large enough to accept three (3) 3" x 6" review stamps of the Contractor, the CM, and the Architect.

4.2. PRODUCT DATA

- 4.2.1. Modify Product Data sheets to delete information that is not applicable to the Project. Provide additional information if necessary to supplement standard information.
- 4.2.2. Product Data Sheets that are submitted with extraneous information not deleted and/or modified will be returned without review to the Contractor for re-submittal.

4.3. SAMPLES

- 4.3.1. Provide physical Samples to illustrate materials, equipment or workmanship, and to establish standards by which completed work may be judged as required by the technical section.
- 4.3.2. Provide Office Samples in sufficient size or as defined in the technical specifications and quantity to clearly illustrate full range of colors, textures, etc. available and the functional characteristics of the product or material.

- 4.3.3. Erect Field Samples or mock-ups as required by the technical sections and/or CM, at the Project site in a location designated by CM. Construct field samples complete, including Work of all trades required in finishing the Work. Provide Field Samples at the request of the Architect and/or CM where construction materials and/or methods deviate from the requirements of the intent of the Contract Documents or conventional construction practice.

4.4. CERTIFICATIONS

- 4.4.1. Certifications shall clearly identify the materials in reference and shall state that the material and the intended installation methods, where applicable, are in compliance with the Contract Documents for this project. Attach manufacturer's affidavits where applicable.

4.5. WARRANTIES/GUARANTEES

- 4.5.1. Provide warranties and/or guarantees as required by the various technical sections and other Contract Documents on the Contractor's letterhead in accordance with the requirements of the documents.
- 4.5.2. Refer to Section 01700 for additional close-out information and requirements including the standard CM Contractor's Guarantee Form that must be signed, without modification, in order to receive final payment. A copy of this form is either found in Section 01600 or is available upon request.

4.6. OPERATING AND MAINTENANCE MANUALS

- 4.6.1. Provide operating and maintenance manuals/data as required by the various technical sections in accordance with the requirements of the documents.

5. SUBMITTAL PROCESS AND RESPONSIBILITIES

5.1. Contractor's RESPONSIBILITIES

- 5.1.1. After the CM's and Architect's review, within one (1) week of receipt, Contractor is to distribute copies of the reviewed submittal to any supplier/fabricators, second or lower tier Contractors or other Contractors that must coordinate with this work. Contractor must maintain one copy at the Project Site for reference use.
- 5.1.2. Do not begin Work which requires submittals until return of submittals with CM's and Architect's stamp and initials indicating review with direction to proceed from either CM or Architect.
- 5.1.3. Contractor's responsibility for errors and omissions in submittals is not relieved by CM's or Architect's review of submittals.
- 5.1.4. Contractor's responsibility for deviations in submittals from requirements of Contract Documents is not relieved by CM's or Architect's review of submittals unless CM and Architect give written acceptance of specific deviations.

5.2. CM'S RESPONSIBILITIES

- 5.2.1. CM's review is for general administrative purposes only and neither this review, nor any subsequent approval by CM of a submittal, shall relieve Contractor from its obligations to comply fully with the Contract Documents.
- 5.2.2. CM will make changes or notations directly on the submittals, identify such review with its review stamp, sign and forward acceptable submittals to the Architect.
- 5.2.3. After the Architect's review, CM will forward submittals to the Contractor and retain one copy.

5.3. ARCHITECT'S RESPONSIBILITIES

- 5.3.1. Architect will review submittals within fourteen (14) Days after receipt, checking only for conformance with the design compliance of the Project and compliance with information given

in the Contract Documents. If the submission is large and/or requires detailed or lengthy review by the Architect, additional time may be required.

5.3.2. Architect will return to CM without review any submittals not bearing the Contractor's or CM's review stamp or not showing that it has been reviewed by the Contractor and CM.

5.3.3. Architect will make changes or notations directly on the submittal, identify such review with its review stamp, obtain and record Architect file copy and return the submittal to CM.

5.4. RE-SUBMISSION REQUIREMENTS

5.4.1. For Shop Drawings: Review returned CM and/or Architect drawings and re-submit as specified. All changes made must be identified through bubbling or other approved method.

5.4.2. For Product Data and Samples Resubmit new data and samples as required.

END OF SECTION 01330

SECTION 01360
COORDINATION (GENERAL)

1 COORDINATION OF WORK/COOPERATION

- 1.01 All Contractors are required to review, discuss and coordinate their Work with the Work of other contractors, Owner and CM with regard to sequence, timing, built-in Work and equipment, layout, location, compatibility of materials and sizes and required clearances prior to beginning the work to avoid construction delays which impact the Owner's occupancy of the facility.
- 1.02 Each Contractor
- 1.02.1 Coordinate installation of different components to assure maximum accessibility for required maintenance, service and repair.
 - 1.02.2 Make provisions to accommodate items scheduled for later installation.
 - 1.02.3 Provide to all other trades all information (drawings, diagrams, templates, embedments, etc.) necessary for the coordination of the Work.
 - 1.02.4 Layout and install its Work at such time and in such manner as not to delay or interfere with the carrying forward of the Work of others.
 - 1.02.5 Verification and Acceptance of previous work
 - 1.02.5.1 As Work under each Agreement commences, the condition of preceding Work under other agreements shall be verified and accepted by each subsequent Contractor when appropriate.
 - 1.02.5.2 Report in a prompt manner any interferences, discrepancies or incompatibilities discovered to CM, whose decision as to the Contractor at fault and as to the manner in which the matter may be resolved, shall be binding and conclusive on Contractors involved. CM may direct layout/ location changes as required to make the entire work fit together. Reasonable changes of this nature will not entitle any Contractor to an increase in contract price.
 - 1.02.5.3 Verification may, at CM's discretion, include a joint review by the subsequent Contractor, previous contractor(s), and CM to note any corrective Work required, similar items affecting the Work and particularly items which prevent acceptance by the subsequent contractors.
 - 1.02.5.4 The verification review procedures and findings shall be submitted in writing by subsequent Contractors to the CM.
 - 1.02.5.5 Any corrective work necessary to satisfy requirements of the Contract Documents shall be performed promptly by the previous Contractor to prevent delay to the work under the subsequent Contracts.
 - 1.02.5.6 After corrective work is accomplished the subsequent Contractor shall furnish written acceptance of the work as noted above.
 - 1.02.5.7 CM's participation in a joint review under this paragraph shall in no event be deemed to constitute approval of any layout or other Work that fails to comply with the **Contract Documents**.
 - 1.02.6 Observation of the Work by others shall not relieve Contractor from its responsibility for coordination, supervision, or scheduling and direction of the Work.
 - 1.02.7 Failure of a Contractor to notify others and CM of a potential interference, incompatibility, or discrepancy and any failure to coordinate Work with that of others prior to installation and/or fabrication shall be at the Contractor's risk.

END OF SECTION 01360

SECTION 01370 COORDINATION DRAWINGS

1. GENERAL REQUIREMENTS

- 1.1. Contractor if required by its Work scope, shall be responsible for developing coordination drawings and participating in coordination meetings as defined herein, and shall have included the cost for such Work in its Bid Proposal.
- 1.2. Coordination Drawings shall be utilized to establish installation sequence, resolve trade coordination issues prior to installation and to make the most efficient use of space allocated for systems such as mechanical/electrical/plumbing installations without sacrifice to systems performance. This is also required to determine inter-relationships and possible interference's between all of the trades' Work and the architectural or structural features.
- 1.3. Contractors are required to attend coordination meetings as required by CM. The representative(s) from each Contractor is required to be familiar with the Work and have the expertise and authority to answer questions and make decisions and changes to its systems at these meetings.
- 1.4. The coordination drawings may also be used by Contractor as part of its required shop drawing and as-built drawing submittals.
- 1.5. Each Bidder should anticipate that each floor may require several meetings. However, in the interest of time, multiple floors or areas may be reviewed in one meeting. Development of coordination drawings will be by area and floor with order of priority established by CM.

2. COORDINATION DRAWING PROCESS

- 2.1. The Electrical Contractor, following an HVAC coordination kick-off meeting, shall immediately begin Work and prepare 1/4" scale layout drawings of all ductwork and piping. These drawings shall also show registers, grilles, diffusers, and similar features. Contractor shall include locations of all valves, dampers and shall note any items requiring access for service and maintenance as well as access doors in inaccessible ceilings. Drawings shall also show the size, layout and routing of all metal and flex ductwork, re-heat coils, terminal units, filters, and major hangers and supports. Contractor shall provide notation for diffuser boot sizes and heights and any other special features. Contractor shall provide cross sections and additional details through areas where clearances are tight and further detail as appropriate and/or required. Where piping or ductwork has external insulation, Contractor shall note or show locations and thickness. Contractor shall indicate bottom elevation of duct, pipes and equipment and elevation changes, to be measured to the lowest point including insulation and hangers where applicable.
- 2.2. In areas where no HVAC work occurs, but where other mechanical and electrical installations are installed, the Electrical Contractor will issue or note on transparencies indicating "No HVAC Work Required".
- 2.3. Within fifteen (15) working days of issuance, the Electrical Contractor shall have completed layout drawings and provide to CM. At this time, all Contractors shall attend a Coordination Kick-Off Meeting at which time the first distribution of HVAC prints is made and procedures and schedule are reviewed.
- 2.4. As layout drawings for HVAC Work for subsequent areas are completed, the Electrical Contractor shall provide prints of the completed layout drawings to CM. CM will in turn distribute prints to each required Contractor to include Plumbing, Fire Protection and Electrical Work. Respective Contractors shall then layout their own routings. Drawings shall include other major items such as valves, access panels, switch panels, pull boxes also noting items requiring access for service and maintenance, etc. as well as access doors in inaccessible ceilings.
- 2.5. Information for specific trades is required but not limited to the following:
 - 2.5.1. Plumbing - Size, layout and routing of piping, valves, boxes, supports, etc., for all utilities regardless of material size. Show or note all pipe sizes and working clearances around valves, etc. For pitched piping, identify bottom elevations at key points and at least every column line. Note thickness and location of all external insulation. Bottom elevations shall be measured to the lowest point including hangers and insulation where applicable.

- 2.5.2. Sprinkler Piping - Size, layout and routing of mains and branch piping, hanger and supports, valves, working clearances, and bottom of pipe and bottom of hanger support elevations. Sprinkler head locations shall be shown on ceiling plans. For pitched piping, identify bottom elevation at key points and at least at every column line.
- 2.5.3. Electrical - Size, layout and routing and size of conduit and wire 2" or larger for normal and emergency power distribution systems, 1-1/2" or larger for communication systems telephone, nurse call, physiological monitoring, etc., include all systems specified, boxes larger than 4" x 4" x 4", hangers, supports, and electrical fixtures including lights, speakers, detectors, sensors, cable trays, raceways, etc. Size and clearance of ceiling and above ceiling mounted items shall be noted as a depth from finished ceiling to top of fixture or top of clear area required. Provide bottom elevations of conduits and equipment. Bottom elevation shall be measured from the lowest point, including hangers.
 - 2.5.3.1. Within four (4) feet of all panels, or areas where more than 4 conduits, regardless of size, are routed or grouped together, identify an easement or right-of-way for the groups of conduit.
 - 2.5.3.2. Also show all wall mounted items located within 12" of the ceiling plane.

3. EXECUTION

- 3.1. In the preparation of all coordination drawings, 1/2" scale details as well as cross and longitudinal sections are required to fully delineate all conditions. Particular attention shall be given to the locations, size and clearance dimensions of equipment items, shafts, corridors and similar features.
- 3.2. After completion of the final coordination drawings, minor changes in duct, pipe or conduit routings that do not affect the intended function may be made as required to avoid space conflicts, when mutually agreed to by all parties involved. However, items may not be re-sized or exposed items relocated without CM's written approval. No changes shall be made by Contractors in any wall or chase locations, ceiling heights, door swings or locations, windows or other openings, or other features affecting the function or aesthetic effect of the building. If conflicts or interference's cannot be satisfactorily resolved, Contractors shall notify CM who will, in turn, obtain a decision from the Architect.
- 3.3. Other Contractors responsible for supplementary composite drawings, as indicated herein, shall make similar distribution to that described in item 1.03 Paragraph E. All trades desiring additional prints of such drawings, beyond the basic distribution indicated above, shall arrange for and pay the cost of same.
- 3.4. Record copies of final drawings shall be retained by CM and each Contractor as working reference. All shop drawings, prior to their submittal to CM shall be compared with the final drawings and developed accordingly by the Contractor responsible. Any revision to the drawings which may become necessary during the progress of the Work shall be noted to and by all Contractors and shall be neatly and accurately recorded on the record copies. Each Contractor shall be responsible for the up-to-date maintenance of its own record copies of the final drawings, and any subsequent changes thereto shall be utilized by CM and each Contractor in the development of As-Built/Record drawings described in Section 01720 of the Project Manual.
- 3.5. The HVAC drawings need not be submitted as a whole, but they shall be submitted in all cases per CM's project master construction schedule and in ample time to avoid construction delays. The coordination drawings of all trades may lack complete data in certain instances pending receipt of shop drawings, but sufficient space shall be allotted for the affected items. When final information is received, such data shall be promptly inserted on the final drawings.
- 3.6. No extra compensation will be paid for relocating any duct, pipe, conduit, or other material that has been installed without proper coordination between all Contractors involved. If any improperly coordinated Work, or Work installed that is not in accordance with the approved coordination composites, necessitates additional Work by the other Contractors, the costs of all such additional Work shall be solely borne by the Contractor responsible.
- 3.7. All changes in the Scope of Work due to revisions formally issued and approved shall be shown on that trade's final drawings and thoroughly coordinated with the other trades.

- 3.8. All Work on the coordination composite drawings shall be performed by competent draftsmen and shall be clear and fully legible. CM shall be sole judge of the acceptability of the drawings. All drawings shall be drawn dimensionally and graphically correct.
- 3.9. In general and before the first meeting the following guidelines shall be followed:
 - 3.9.1. All trades shall coordinate with the Electrical Contractor for the size, height and clearance requirements for recessed or semi recessed light fixtures, recessed speakers/detectors, and other electrical ceiling devices.
 - 3.9.2. Sprinkler heads shall be centered in the center of lay-in ceiling tiles unless approved shop drawings note otherwise.
 - 3.9.3. All elevations shall be based on height above finished floor using established benchmarks.
 - 3.9.4. Standard suspended ceiling systems require 3" minimum clearance for materials and installation.
 - 3.9.5. Review of other drawings may be necessary for special structural and suspended equipment requirements.
 - 3.9.6. All trades to hang work as high as possible in above ceiling areas, allowing access to equipment for maintenance, repairs, connections, filters and removal without demolition of other Work.
- 3.10. Coordination drawings submitted during this process are not considered shop drawing submittals. The coordination drawings may be part of the required shop drawing submittal, but are made separate from the distribution specified in this section.

END OF SECTION 01370

SECTION 01400 QUALITY REQUIREMENTS

1. DOCUMENT CONTROL PROCEDURE

- 1.1. Each Contractor is to provide CM its document control procedure to include drawing submittals and surveillance. In the absence of such a procedure, the Contractor will use the following procedure for document control.

“A log is maintained identifying the drawing revision status, issue date and distribution (internal and external). The transmittal issuing the changed documents will indicate what changes are made and indicate that the documents are approved for use. Contractor meetings include a review of approved drawings. The review is documented in the meeting minutes. Superintendent surveillance activities include monitoring Contractor drawing use.”

2. QUALITY CONTROL

- 2.1. Each Contractor is responsible to provide the Owner with a completed quality product for its Work. Each Contractor shall be responsible for any costs associated with re-testing and re-performing the Work as a result of the Contractor's poor performance or workmanship or other failure to comply with the Contract Documents.
- 2.2. All Work shall be done by persons qualified in their respective trades, and the workmanship shall be first-class in every respect. **Each Contractor is responsible for ensuring employees are appropriately trained.** All materials and equipment furnished shall be the best of their respective kinds for the intended use and unless otherwise specified, same shall be new and of the latest design.
- 2.3. The Contractor shall provide CM, Owner and Architect access to the Work in preparation and progress wherever the Work is located at all reasonable times.

Note: CM and the Architect will have the authority to reject Work that does not conform to the Contract Documents or may require special inspection or testing, whether or not such Work is to be then fabricated, installed or completed. The Architect shall make all decisions with respect to questions concerning the quality or fitness of materials, equipment and workmanship.

- 2.4. Failure by a Contractor to conduct its operations, means and methods and coordinate proper sequencing of the Work may cause the Troy School District to withhold payment or any other means deemed necessary to correct non-conforming Work.

3. NOTIFICATIONS AND CORRECTIONS OF NON-CONFORMANCE

- 3.1. CM and the Architect may conduct observations/evaluations of the Contractor's Work. CM and/or Architect's reviews do not relieve the Contractor from compliance with the Contract Documents or necessary corrections for deficiencies thereof. Contractors whose Work does not meet the standards set by the Contract Documents will be notified by representatives of the CM using a Corrective Action Report. The Contractor, upon receipt of the Corrective Action Report, shall complete and return the form and provide the corrective actions necessary in a timely manner as outlined.
- 3.2. The **Corrective Action Report (CAR) (CON 18.2)** is in Section 01600 Forms.

4. CONTRACTOR PERFORMANCE EVALUATION

- 4.1. CM will be evaluating Contractor's performance and will provide feedback during the life of the Project, on Contractor's performance, for the purpose of improving CM's Contractor selection process for future project endeavors.
- 4.2. This Contractor Performance Evaluation form is generated by the CPS Database.

END OF SECTION 01400

SECTION 01450
TESTING AND INSPECTION SERVICES

1. CONTRACTOR'S RESPONSIBILITIES

- 1.1. The testing firm will report directly to the Troy School District. Copies of test and inspection reports will be furnished to the appropriate Contractors. The laboratory and its representatives will be instructed to promptly call to the attention of the Contractor any instance of non-compliance with the requirements of the Contract Documents. Failure to so notify the Contractor shall not relieve the Contractor of any of its responsibilities for compliance or making good workmanship or materials which are not in compliance with the requirements of the Contract Documents.
- 1.2. Each Contractor shall cooperate with the testing firm and provide labor to assist and lifts, ladders or other means to permit full access for testing firm and to assist with sample preparations where applicable.
- 1.3. The Contractor is responsible to pay the cost of additional testing in the event that additional testing of the Contractor's materials, installation, and other Work is required by the independent testing laboratory because of test results not in compliance with the Contract Documents and/or additional testing required as a result of Contractor's negligence or poor workmanship.

2. CONTRACTOR RESPONSIBILITIES

2.1. CONTRACTOR SHALL:

- 2.1.1. Notify CM sufficiently in advance of operations (24-hours minimum) to allow for laboratory assignment of personnel and scheduling of tests.
 - 2.1.1.1. When tests or inspections cannot be performed after such notice, reimburse Troy School District for all expenses incurred arising out of or resulting from Contractor's negligence.
- 2.1.2. When the Contractor is providing the testing and prior to start of Work, submit testing laboratory name, address, and telephone number, and names of full time registered engineer and responsible officer. Submit copy of report of laboratory facilities inspection made by Materials Reference Laboratory of National Bureau of Standards (NBS) during most recent tour of inspection, with memorandum of remedies of any deficiencies reported by the inspection.

3. RE-TEST RESPONSIBILITY

- 3.1. Where the results of required inspections, tests, or similar services prove unsatisfactory and do not indicate compliance with the requirements of the Contract Documents, the re-tests shall be the responsibility of the Contractor regardless of whether the original test was the Contractor's responsibility.
- 3.2. Re-testing of Work revised or replaced by the Contractor is the Contractor's responsibility where required tests were performed on original Work. All costs and fees for re-testing shall be paid by the Contractor.
- 3.3. Schedule delays and costs which are the result of non-conforming work or remedy will be the responsibility of the offending Contractor.

END OF SECTION 01450

SECTION 01500 INTERIM LIFE SAFETY PLAN

1. PURPOSE AND POLICY

- 1.1. **PURPOSE:** To provide interim life safety measures during a construction Project. To protect Owner personnel, visitors, [patients] and property from fire and injury during remodeling or construction. This policy is used wholly or in conjunction with the safety program in the Project Manual.
- 1.2. **POLICY:** During a construction Project it shall be the responsibility of the Director of Facilities (or designee) and CM (through trade Contractors) to maintain compliance with the Life Safety Code NFPA Section 101. Compliance will be through the implementation of the following:

2. NOTIFICATIONS

- 2.1. Contractor shall communicate with and coordinate through CM for all changes to Life Safety measures including changes to: egress, the fire suppression system, the fire alarm system or any other Life Safety related changes to the construction site. Contractor is required to simultaneously notify the appropriate Owner personnel / departments: Owner's PM, Security, Facilities, Safety, Local and/or state fire, 911 emergency services, etc.
- 2.2. Advanced notification using the appropriate form shall be submitted not less than twenty-four (24) hours in advance of the work. Forms can be obtained through CM.

SHUTDOWN REQUEST TYPE	FORM NAME [VERIFY WITH OWNER'S REQUIREMENTS]	SUBMIT FORM IN ADVANCE OF PROPOSED WORK BY:	SUBMIT FORM TO:
CHANGE IN EGRESS:	Submit egress plan of existing exiting and proposed change	3 Weeks	CM; CM to schedule a review meeting with the Owner and Architect for final approval
Change in Fire Suppression	Sprinkler Shut-Down Request	1 Week	CM for initial review 5 days prior; upon approval from CM simultaneously submit to CM, Safety, Security, OTHERS
Change in Fire Alarm	Fire Alarm Shut-Down Request	1 Week	CM for initial review 5 days prior; upon approval from CM simultaneously submit to CM, Safety, Security, Owner's Insurance Agency, State and/or Local Fire Department, ,VERIFY OTHERS
Mechanical Piping, HVAC or Electrical Shut-Down	Utility Shut-Down Request	1 Week	CM for initial review 5 days prior; upon approval from CM simultaneously submit to CM, Safety, Facilities, Security, OTHERS

3. INTERRUPTION OF EXIT - EGRESS CORRIDOR

- 3.1. Should construction of temporary structures for egress/exit be necessary:

- 3.1.1. Contractor will review with and obtain approval from CM any changes to the means of egress. This review and approval shall include the Owner and Architect to confirm appropriate travel distances to exits are maintained/established.
- 3.1.2. Contractor shall obtain approval from the appropriate agency for any planned temporary exiting structure prior to construction/implementation.
- 3.1.3. All Contractors shall be responsible for maintaining temporary egress/exits:
 - 3.1.3.1. Each Contractor is responsible to protect, kept free of restrictions or obstructions, and maintain in full use all entrances to and exits from existing buildings and the construction site at all times. The safety and well-being of all persons must be of prime concern.
 - 3.1.3.2. Contractor shall maintain and not disturb any temporary construction, including stairs, ramps, protected walkways, railings, lights and direction signage as required to maintain adequate exiting from the existing building.
- 3.2. Should an alternate egress route be necessary:
 - 3.2.1. Contractor shall submit the appropriate forms to CM so all affected departments will be notified. Contractor shall not begin any work associated with a change in egress until the Owner has verified its internal departments are notified and prepared for the change.
 - 3.2.2. Contractor shall install and maintain temporary exit signage and Contractor shall install and maintain temporary directional signage prior to starting Work associated with the change in egress..
- 4. INTERRUPTION OF THE SPRINKLER SYSTEM
 - 4.1. Refer to the above matrix for advanced notification times and shut-down request distribution.
 - 4.2. Priority will be given to localized interruption of these systems on first shift Monday through Friday when full staff is available when any shut down is necessary:
 - 4.3. Contractor will provide an organized fire watch until the system is fully functional.
- 5. INTERRUPTION OF FIRE/SMOKE DETECTION AND ALARM SYSTEM
 - 5.1. Refer to the above matrix for advanced notification times and shut-down request distribution.
 - 5.2. Contractor shall maintain the operation of the total fire detection/alarm during the construction.
 - 5.2.1. It is acceptable for the Contractor to place a thin plastic cover over the detector head during high dust producing activities with Contractor's prompt removal upon completion of the work.
 - 5.2.2. At all other times the system will be returned to normal operating status.
 - 5.3. Should the fire/smoke detectors and alarms systems be interrupted:
 - 5.3.1. Contractor will provide an organized fire watch until the system is fully functional.
 - 5.3.2. Temporary alarm pull stations will be established as a minimum should the interruption last more than twenty-four (24) hours.
- 6. CONSTRUCTION SITE MAINTENANCE
 - 6.1. For interior construction. Contractor **shall**:
 - 6.1.1. Refer to the above matrix for prior notifications.
 - 6.1.2. Maintain existing Fire/Smoke Barriers and compartments.
 - 6.1.3. Provide and maintain temporary partitions adjacent to functioning departments that are a UL rated 2-hour assembly and smoke/dust tight and non-combustible. Provide documentation of the UL rated assembly type to CM prior to constructing this Work.

- 6.1.4. Maintain temporary enclosures, fire-rated dust curtains, and all other necessary materials and equipment as required to prevent introduction of dust, dirt or debris into occupied portions of the building.
 - 6.1.5. Coordinate locking of the construction area with CM and the Owner.
- 6.2. For exterior construction - Contractor shall:
 - 6.2.1. Maintain site clearance for access to the external fire department connections.
- 7. REFERENCES
 - 7.1. All current Life Safety codes

END OF SECTION 01500

SECTION 01520 TEMPORARY CONSTRUCTION

1 SUMMARY

1.01 This Section describes the following requirements including:

- 1.01.1 Project Signage
- 1.01.2 Snow Removal
- 1.01.3 Security
- 1.01.4 Temporary Field Office, Facilities and Parking
- 1.01.5 Temporary Fencing
- 1.01.6 Temporary Toilet Facilities
- 1.01.7 Drinking Water/Temporary Water
- 1.01.8 Roof Protection
- 1.01.9 Scaffolding
- 1.01.10 Water Control
- 1.01.11 Temporary Material Hoist/Elevator
- 1.01.12 Fire Precautions and Protection
- 1.01.13 Noxious Odors and Fumes
- 1.01.14 Temporary Stairs, Ladders, Ramps, Runways, and Barricades
- 1.01.15 Temporary Electrical Power and Light
- 1.01.16 Temporary Heating and Weather Protection
- 1.01.17 Temporary Enclosures

2 CONSTRUCTION FACILITIES

2.01 PROJECT SIGNAGE

- 2.01.1 The CM shall provide a project sign. No other signs or advertising shall be displayed on the premises without the approval of the Architect, Owner, and CM. This does not exclude the posting of required trade notice and cautionary signage by Contractors.

2.02 SNOW REMOVAL

- 2.02.1 Contractors performing Work under exposed conditions shall remove snow and ice for the protection and execution of their Work. Keeping public traffic areas and circulation routes free of snow shall be the responsibility of the CM/DESIGNATED CONTRACTOR.

2.03 SECURITY

- 2.03.1 The services of a security guard(s) will not be provided by CM.
- 2.03.2 Each Contractor, at its own cost and expense, may provide security guard, protective service or other means of site security as it deems necessary.
- 2.03.3 Contractors shall advise CM of any theft or damage which might delay the execution of the Work and furnish the Owner and CM with a copy of any theft report filed with local, county or state agencies.
- 2.03.4 Neither CM nor Owner assumes any responsibility for loss, theft or damage to the Contractor's materials or for damage to Work in place before the completion of the construction. In the instance of any such loss, theft or damage, the Contractor shall be responsible to renew, restore or

remedy the Work, tools, equipment and construction in accordance with requirements of the Contract Documents without additional cost to CM.

- 2.03.5 CM is not responsible for damage, liability, theft, casualty or other hazard to the automobiles or other vehicles, nor to injury, including death, to occupants of automobiles or other vehicles on the Owner's property.
- 2.03.6 CM may establish additional security policies and procedures. All Contractors will be required to cooperate with CM in implementing these procedures.
- 2.03.7 Site-parked equipment, operable machinery and hazardous parts of the new construction subject to mischief and accidental operation shall be inaccessible, locked or otherwise made inoperable when left unattended.

2.04 TEMPORARY FIELD OFFICE, FACILITIES AND PARKING

- 2.04.1 The Owner may designate an area for construction trailers. Placement and scheduled duration shall be coordinated by CM. Each Contractor is responsible to verify that all field offices, trailers and storage sheds shall be in accordance with the local Fire Marshal having jurisdiction. Each Contractor shall arrange and pay for its own telephone hookup and use. Each Contractor shall arrange and pay for its own temporary electrical hook-up, water and toilets. The Contractor shall pay for all power used for the Contractor's temporary field office and temporary electrical service. Construction personnel will be allowed to use the existing Owner parking facilities. Designated Contractors will be allowed to have on-site construction trailers. Construction trailers shall be limited to 10' x 30' or smaller.
- 2.04.2 Contractors shall maintain the use of designated space for offices and sheds. This includes removal of weeds, debris, trash and clean-up of the area after removal of such temporary structures.
- 2.04.3 Temporary field offices and sheds shall not be used for living quarters. .
- 2.04.4 Offices and sheds shall be of suitable design, maintenance and appearance, and meet the approval of CM and all applicable local codes and ordinances.
- 2.04.5 All temporary offices and sheds including foundations, must be removed within ten (10) days of written notice from CM including restoration of grade. Structures not removed in a timely manner will be removed by CM at Contractor's expense.
- 2.04.6 If a temporary office is built in the building, it must be fire treated in accordance with Section 01510, Fire Precautions and Protection.

2.05 TEMPORARY FENCING

- 2.05.1 The DESIGNATED CONTRACTOR shall provide temporary fencing with gates for required access and remove same at the completion of the Project.
- 2.05.2 The Contractors shall repair or replace fencing damaged as a result of its operation. Contractors shall remove and replace fencing and gates required to provide access for oversized items.
- 2.05.3 Contractor's personnel are not allowed to work outside of the construction fence without permission of CM.

2.06 TEMPORARY TOILET FACILITIES

- 2.06.1 The CM shall provide and maintain temporary toilet facilities for the construction of the Project. The use of the Owner's existing permanent facilities is as described in Section 01140 Use of Premises.
- 2.06.2 During renovation activities, CM may obtain, through the Owner, permission to use designated toilet facilities within the contract boundaries for construction use. The use of the Owner's existing permanent facilities outside the construction boundaries is strictly not allowed.

2.07 DRINKING WATER/TEMPORARY WATER

- 2.07.1 The Owner will pay for water used on this. Each Contractor shall be responsible to provide containers, paper cups, ice, hoses, etc. for its needs.
- 2.07.2 Immediately after award of the Agreement, the Mechanical Contractor shall furnish, install, maintain and subsequently remove a temporary hookup to the Owner's potable water system where directed by CM for construction purposes. The Contractor shall provide all temporary piping and approved backflow prevention as necessary for distribution from the source. Distribution of temporary water will be paid for by Contractors requiring same. A minimum of two (2) hose bibs shall be provided by the Mechanical Contractor as directed by CM.

2.08 ROOF PROTECTION

- 2.08.1 Contractors and their Subordinate Parties, shall be responsible for damages to roofing, sheet metal and roof structure while performing Work. The Roofing Contractor will perform the repair Work at the expense of the Contractor responsible for the damage.
- 2.08.2 All Contractors will protect adjacent existing roof surfaces while performing their Work. No construction materials will be allowed to be placed on existing roof surfaces without prior approval of the Owner through CM.

2.09 SCAFFOLDING

- 2.09.1 Each Contractor is responsible for providing and maintaining any and all ladders, scaffolds, and other staging as required to complete all work. All such ladders, scaffolds and staging equipment shall be erected, maintained and subsequently removed by each Contractor in accordance with all applicable safety laws, rules and regulations.

2.10 WATER CONTROL

- 2.10.1 All pumping, bailing or well point equipment necessary to keep excavations and trenches free from the accumulation of water during the entire excavating and backfilling progress of the Work shall be the responsibility of the Contractor performing said excavations and trenches due to its scope of Work.
- 2.10.2 Each Contractor shall be responsible for keeping the building at grade and below free from water from the time the building backfill is completed until the building is watertight.
- 2.10.3 Dispose of water in such a manner as will not endanger public health or cause damage or expense to public or private property. Abide by the requirements of any public agencies having jurisdiction.

2.11 TEMPORARY MATERIAL HOIST/ELEVATOR

Each Contractor is responsible for its own hoisting and material/ equipment movement costs as required to complete the Work under its Agreement.

- 2.11.1 CM may operate and maintain a permanent elevator until such time as all material hoisting requirements have been met. Elevator requirements in excess of the capacity or size of this elevator shall be provided by each Contractor at its expense. This elevator shall not be used for the placement of concrete, the transporting of workers, or other means inconsistent with its use as directed by CM. The operating cost for all overtime use of the elevator shall be paid by the Contractor requiring such services.
- 2.11.2 The Elevator Contractor shall be obligated to extend warranty and guarantee periods on any permanent equipment used prior to Substantial Completion.
- 2.11.3 Transportation of construction materials through the Owner's facility shall be accomplished in accordance with the requirements described in Section 01140 Use of Premises in such a manner so as to:
 - 2.11.3.1 Not damage any of the existing facility.
 - 2.11.3.2 Not impair the Owner's use of the facility.

2.11.3.3 Not create any type of mess or additional cleaning requirements in Owner occupied areas.

2.11.4 The Owner's lifting equipment is not available for the unloading, conveying or installation of Contractor's materials.

3 FIRE PRECAUTIONS AND PROTECTION

3.01 All Contractors and their Subordinate Parties shall

3.01.1 Assume full responsibility and take all necessary precautions to guard against and eliminate all possible fire hazards and to prevent damage to any construction work, building materials, equipment, temporary field offices, storage sheds, and all other property, both public and private.

3.01.2 Conspicuously post the location of the nearest fire alarm pull box and the telephone number of the local fire department within the field offices and on the construction site adjacent to its Work

3.01.3 Take precautions to prevent fire hazards in accordance with all fire protection and prevention laws and codes. No open fires shall be permitted.

3.01.4 Shall not be permitted to perform welding, flame cutting, or other operations involving the use of flame, arcs, or sparking devices without submitting a Hot Work Permit to CM a minimum of 24 hours prior or without adequate protection and shielding. Hot Work Permits can be obtained through CM. All combustible and flammable material shall be removed from the immediate area of the hot work. Material shall be protected with a fire resistant tarpaulin to prevent sparks, flames, or hot metal from reaching materials.

3.01.4.1 Only fire resistant tarpaulins shall be used on this Project.

3.01.5 Provide the necessary personnel and firefighting equipment to effectively control incipient fires resulting from the hot work.

3.01.6 Provide its own fire extinguishers in the immediate area of the Work.

3.01.7 Review the entire Project at least once a week to make certain it has adhered to the conditions and requirements set forth herein.

3.01.8 Shall not bring into building at any one time more than a one day supply of flammable liquids such as oil, gasoline, paint or paint solvent

3.01.8.1 All flammable liquids having a flash point of 110 degrees F or below, which must be brought into any building, shall be confined to Underwriter's Laboratories' labeled safety cans.

3.01.8.2 The bulk supply of all flammable liquids shall be detached at least 75 feet from the building and from yard storage of building materials.

3.01.8.3 Spigots on drums containing flammable liquids are prohibited on the project site. Drums are to be equipped with approved vent pumps.

3.01.9 Not store or leave overnight within the confines of the permanent building any combustible materials.

3.01.9.1 This includes all internal combustion engines using gas or fuel oil.

3.01.9.2 Hoisting of flammable or combustible materials to the roof shall only be in quantities as needed for immediate use

3.01.10 Agree that, in the event of fire, all its workers anywhere on site will assist in extinguishing the fire

3.01.11 Coordinate with the Owner and CM the permanent fire protection water supply, fire extinguishing equipment, shut down and tie-ins between new and existing fire protection systems shall be installed at the earliest possible date.

- 3.01.11.1 As each sprinkler system is completed and placed in service, the control valve shall be sealed. Permission to break seals and close sprinkler valves shall be given only by CM with approval of the Owner.
 - 3.01.12 Not place shanties of combustible construction inside of any structure.
 - 3.01.12.1 Such shanties shall be detached at least seventy-five (75) feet from the building or as directed by CM with approval of the Owner.
 - 3.01.12.2 Totally incombustible shanties may be, if approved in writing by CM, located inside of the structure
 - 3.01.12.3 Use of only Underwriter's Laboratory approved heaters and/or stoves is permitted in field offices or storage sheds and they shall have fire resistive material underneath and at the sides near partitions and walls. Pipe sleeves and covering shall be used where stove pipe runs through walls or roof
- 3.02 FIRE EXTINGUISHERS
 - 3.02.1 Fire extinguishers shall be "all purpose", and not a water type, to meet the approval of the Fire Underwriter's Laboratory, and will be inspected at regular intervals and recharged if necessary.
 - 3.02.2 In areas of flammable liquids, asphalt or electrical hazards, extinguishers of the 15 lb. carbon dioxide type or 20 lb. dry chemical type shall be provided
 - 3.02.3 **CM** will provide and maintain in working order at all times during construction not less than a fire extinguisher for each 3000 sq. feet with travel distance not to exceed 100 feet.
 - 3.02.4 All other required extinguishers shall be provided by the Contractor creating such hazard
- 3.03 NOXIOUS ODORS AND FUMES
 - 3.03.1 Combustion engine equipment, tar kettles and any other items causing noxious odors or fumes, including diesel powered equipment, will NOT be allowed in the building or near air intake louvers or building entrances and exits. If intake louver locations are in doubt, consult with CM.
- 4 TEMPORARY STAIRS, LADDERS, RAMPS, RUNWAYS, AND BARRICADES
 - 4.01 Each Contractor is to provide and maintain all necessary temporary stairs, ladders, ramps, and runways to facilitate conveyance of workers, materials, tools, and equipment for proper execution of its Work. All protection and safety barricades, devices, covers, and all other necessary items shall be provided by each Contractor as it relates to the safe conduct of its Work and protection of people and property in its Work area in accordance with applicable law.
 - 4.02 Any Contractor or Subordinate Party performing excavation Work shall be responsible to furnish, install and maintain temporary barricades and/or fencing of all open excavations until such time as the backfilling is complete. Flasher lights shall be provided on barricades and fencing by the Contractor as requested by CM and in accordance with applicable law. As a minimum, all barricades across roads and walks shall have lights on them in working condition.
 - 4.03 Prior to the removal of all shoring and forms, the DESIGNATED CONTRACTOR shall be responsible for temporary protection at the building floor perimeters and openings. Immediately after the removal of all shoring and forms, the DESIGNATED CONTRACTOR shall furnish, install, and maintain all necessary temporary protections at the building floor perimeters and openings. Protection shall be OSHA 29 CFR Part 1926.502 (B) "Guardrail Systems" and shall include but not be limited to two line rails and toe boards. Each Contractor that disturbs any temporary protection for its Work is responsible to reinstall to its original condition the guardrail or barricade system for the protection of the workers and others until final construction of perimeter exterior wall and/or shaft openings is completed. All other protection and safety barricades, devices, covers, etc., including those at all roof areas, shall be provided by the DESIGNATED CONTRACTOR] Contractor as it relates to the safe conduct of its Work in accordance with all local, state and federal law, rules and regulations and the requirements of the Contract Documents and shall be in accordance with the most stringent requirements.

- 4.04 The DESIGNATED CONTRACTOR shall provide temporary guardrails at the building floor perimeters, interior shafts, all roof areas, or other openings, immediately after the erection of the steel or precast frame and with the installation of metal or decking. Protection shall be OSHA 29 CFR Part 1926.502 (B) "Guardrail Systems" and shall include but not be limited to two line rails and toe boards. This temporary protector shall be left in place after completion of the steel or precast frame for the use of all other Contractors. The DESIGNATED CONTRACTOR shall maintain and remove said guardrails and patch concrete. Each Contractor that disturbs any temporary protection for its Work is responsible to protect the area during its Work and to reinstall to its original condition the guardrail or barricade system for the protection of the workers and others until final construction of perimeter exterior wall and/or shaft openings is completed. All other protection and safety barricades, devices, covers, etc. shall be provided by this Contractor as it relates to the safe conduct of its Work in accordance with all local, state and federal regulations and the requirements of the Contract Documents, and shall be in accordance with the most stringent requirements.
- 4.4. Each Contractor and its Subordinate Parties shall provide and maintain in good repair barricades, overhead protection, guard rails, etc., as required by law or necessary for the protection of the public and personnel engaged in the Work from hazards incidental to performance of the Work. Contractor shall do everything necessary to protect the Owner's employees, the public and workers from injuries and to protect vehicles and other property from damage.

5. TEMPORARY ELECTRICAL POWER AND LIGHT

5.1. Electrical Energy Costs

- 5.1.1. The Owner will pay for electrical energy to operate temporary electrical power and lighting for the duration of the project at designated locations. Temporary power will be provided free of charge.

5.2. Power Source

- 5.2.1. The Electrical Contractor shall provide, install, and pay for labor, equipment and materials required to make connections to the Owner's power source and to provide temporary electrical power and light distribution. The Electrical Contractor shall coordinate the location of the electrical power and lighting as directed by CM.
- 5.2.2. The Electrical Contractor will provide for the CM's construction trailer a 120/208 volt (or 120/240 volt), 100 ampere single phase power source. The cost of hook up and removal of temporary electrical service to other contractor's trailer shall be each Contractor's responsibility.
- 5.2.3. Protection shall be provided for the power supply source complete with disconnect switch and other required electrical devices.

5.3. Rules and Regulations:

- 5.3.1. All temporary equipment and wiring for power, lighting and distribution requirements shall conform to OSHA/NFPA requirements and be in accordance with applicable provisions of governing laws, codes, and ordinances.
- 5.3.2. All temporary wiring and distribution equipment shall be maintained so as not to constitute a hazard to persons or property.

5.4. Temporary Power Distribution:

- 5.4.1. The Electrical Contractor will provide and maintain temporary power distribution as follows:
- Construction power shall be 120/208 volts, 3 phase, 4 wire plus ground. Provide the following outlets together with feeders, grounding, protective devices and ground fault interrupting devices.
- 5.4.1.1. Power centers - on each floor of the new building, provide a minimum of two (2) power centers or not less than one (1) per 10,000 s.f. rated not less than 100 amperes at 120/208 volt, 3 phase. 4 wire plus ground. Within the remodeled areas, provide at least one (1) additional similarly rated power center. Locate the power centers such that each will serve approximately equal areas and as far as possible, each be in the center of the respective area served.

- 5.4.1.2. 120 volt duplex outlets - Provide weatherproof, G.F.I. protected, 20 ampere grounded outlets at a minimum rate equal to 1 - duplex outlet per 400 square feet. Outlets may be grouped in clusters of up to six duplex types with corresponding pro-rated increase in area served, provided that every portion of the construction and remodeled premises can be reached from the nearest outlet using a flexible cord no more than 50 feet in length.
- 5.4.2. As partitions are erected, locations of power distribution points shall be added or relocated.
- 5.4.3. Ground Fault Circuit Interrupter (GFCI) protection will be provided on all temporary power receptacles and, where possible, directly on the circuit breaker supplying temporary power as referenced in NEC 305-6(a).
- 5.4.4. The assured equipment grounding conductor program is only to be used on circuits greater than 20 amps as referenced in NEC 305-6(b).
- 5.5. Temporary Electrical Light Distribution:
 - 5.5.1. The Electrical Contractor shall provide and maintain temporary electrical light distribution as follows:
 - 5.5.1.1. Lighting shall be achieved using 120 volt guarded incandescent fixtures, or other suitable fixture types, to Federal or State OSHA required minimum levels of illumination.
 - 5.5.1.2. 120 volt temporary lighting as required in interior work areas. In addition to these minimum requirements provide adequate security lighting at guarded entrances outside storage areas, parking areas, and in areas of Contractor's and Architect's field offices and sheds.
 - 5.5.2. As partitions are erected or other interferences which hamper achieving the minimum levels of illumination, locations of lighting distribution points shall be added or relocated.
 - 5.5.3. Task lighting in addition to OSHA required lighting shall be provided by each Contractor.
- 5.6. Temporary Power and Light for Special Conditions:
 - 5.6.1. Special conditions for temporary electrical power and lighting required by others shall be provided as follows:
 - 5.6.1.1. Each Contractor requiring service of capacity or characteristics other than specified must make arrangements with the Electrical Contractor and pay for their own installation, removal, and service.
 - 5.6.1.2. Where 3 phase power is required, the Contractor must pick up service at the distribution panel located outside the building addition.
 - 5.6.1.3. The necessary grounded portable cords, lamps, light-stands, and fuses from the distribution outlets to points of use shall be provided by each Contractor to suit its own requirements.
 - 5.6.1.4. Temporary power cannot be used for welding operations.
- 5.7. Servicing of Temporary Power and Lighting:
 - 5.7.1. The Electrical Contractor shall be responsible for the following:
 - 5.7.1.1. Servicing, repairing and rearrangement of service equipment, temporary power, temporary lighting, and re-lamping.
 - 5.7.1.2. Removal and disposal of temporary electrical power and lighting at completion of the Project or when so directed by CM and repair of damage caused by installation or removal.
- 5.8. Permanent Electrical Power and Lighting:

- 5.8.1. When permanent electrical power and lighting systems are in operating condition, they may be used for temporary power and lighting for construction purposes provided the Electrical Contractor:
 - 5.8.1.1. Obtains the approval of the Architect and/or Owner through CM.
 - 5.8.1.2. Assumes full responsibility for operation of the entire power and lighting systems.
 - 5.8.1.3. Verifies that warranty dates are established prior to usage of equipment and lamps.
 - 5.8.1.4. Pays costs for operation, maintenance, and restoration of the systems.
- 5.8.2. As permanent power and lighting becomes available, these systems will generally supplant the appropriate portions of the temporary installation.

6. TEMPORARY HEATING AND WEATHER PROTECTION

- 6.1. Temporary heating requirements during the course of construction shall be divided into two categories as follows:
 - 6.1.1. Cold weather protection.
 - 6.1.2. Temporary heating.
- 6.2. Cold Weather Protection:
 - 6.2.1. Heating required during the construction period prior to enclosure of the building shall be classified as "cold weather protection."
 - 6.2.2. Each Contractor shall provide temporary heating and protection, necessary to allow its Work to continue during cold weather to meet the project milestone dates prior to building enclosure, including:
 - 6.2.2.1. The heating of materials (such as water and aggregate) as well as space heating for protection of newly placed or built construction at required temperatures (but not lower than 50 degrees F) and for the time specified.
 - 6.2.2.2. Fire retardant tarpaulins and other materials used for temporary enclosures.
 - 6.2.3. Each Contractor shall provide plan to allow Work to continue without regard to temperature.
 - 6.2.4. Heat shall be provided by smokeless UL approved portable unit heaters, using fuel of types and kinds approved by Underwriter's Laboratories, Factory Mutual, and the Fire Marshal.
 - 6.2.4.1. The Contractor shall provide fuel, power, maintenance, and attendance required for operation of portable heaters.
 - 6.2.4.2. Interior or exterior surfaces damaged by the use of portable heating units shall be replaced with new materials at the responsible Contractor's expense.
 - 6.2.5. It shall be the responsibility of each Contractor to protect its own Work.
- 6.3. Temporary Heating:
 - 6.3.1. Daily construction heat required after the building is enclosed shall be classified as "temporary heating" and will be the responsibility of the Mechanical Contractor to install and maintain.
 - 6.3.2. The building or buildings or any portions thereof shall be considered enclosed when in the opinion of CM:
 - 6.3.2.1. The exterior wall system and temporary interior wall enclosures are in place.
 - 6.3.2.2. Openings in exterior walls are covered to provide reasonable heat retention.
 - 6.3.2.3. The building is ready for interior drywall, masonry and plastering operations.
 - 6.3.2.4. The permanent roof is substantially installed.

The CM shall provide and maintain the temporary interior wall enclosures. If the exterior wall system is not complete in time to provide building enclosure of a portion of the new structure as scheduled, the CM shall provide and maintain temporary exterior wall enclosures of polyethylene and, in addition to exercising all other rights and remedies under the Contract Documents and law, CM shall be entitled to deduct the cost of such enclosures from the moneys due or to become due the Contractor(s) responsible for failure to meet said schedule.

- 6.3.3. In areas of the building or buildings where Work is being conducted, the temperature shall be maintained as specified in the various sections of the specifications, but not less than 50 degrees F for interior rough-in and not less than 60 degrees F during finishes installation. The temperature shall not be allowed to reach a level that will cause damage to any portion of the Work, including materials stored in the building, which may be subject to damage by low temperatures.
- 6.3.4. Until the permanent heating system, or suitable portion thereof, is in operating condition, provide sufficient and UL approved space heaters of suitable capacity to maintain required temperatures in areas where work is being conducted and materials are stored. Include all necessary maintenance, venting and attendance for this temporary heating to meet all applicable laws, rules and regulations.
- 6.3.5. When the permanent heating system, or a suitable portion thereof, is in operating condition, the system may be used for temporary heating, provided the Electrical Contractor:
 - 6.3.5.1. Obtains approval from CM in writing for its use and any special provisions required for its temporary operation.
 - 6.3.5.2. Assumes full responsibility for the entire heating system until final acceptance of the system by the Owner.
 - 6.3.5.3. Uses supply only, not return if temporary heating utilizes the building's ductwork system.
 - 6.3.5.4. Pays all costs for maintenance, attendance and restoration to "like new" condition of the system including final cleaning of equipment and ductwork and all necessary touch-up painting.
 - 6.3.5.5. Turns over satisfactory evidence to CM showing the extended warranties from manufacturers and proper maintenance procedures.
 - 6.3.5.6. Provides and maintains temporary filters, boxes and other parts used for the temporary condition and replaces same with the new permanent filters at time of occupancy consistent with the warranty provisions. The Electrical Contractor shall pay the cost of extending warranty and guarantee periods on any permanent equipment used prior to substantial completion.
- 6.3.6. Electrical power required for temporary heating will be furnished free of charge. The installation and service of the necessary temporary electrical feeders will also be the responsibility of the Electrical Contractor.

6.4. TEMPORARY ENCLOSURES

- 6.4.1. The Carpentry Contractor (or as specified in the Work Scopes) shall provide temporary (insulated) weather-tight closures of openings in exterior surfaces to provide acceptable working conditions and protection for materials, to allow for temporary heating, and to prevent entry of unauthorized persons. Provide doors with self-closing hardware and locks.
- 6.4.2. The Roofing Contractor (or as specified in the Work Scopes) shall provide temporary roofing as required to provide and maintain a watertight enclosure during construction.
- 6.4.3. The Drywall Contractor (or as specified in the Work Scopes) shall provide temporary partitions and ceilings as required to separate Work areas from Owner occupied areas, to prevent penetration of dust and moisture into Owner occupied areas and to prevent damage to Owner's facilities and equipment.

END OF SECTION 01520

SECTION 01530
FIELD ENGINEERING AND LAYOUT

1 LAYOUT OF THE WORK; Each Contractor shall

- 1.1. be responsible for the layout and engineering of its own Work from the established points and lines given by a registered surveyor employed by CM and to coordinate with all other trades.
- 1.2. be responsible for detailed and accurate layout of its own and its Subordinate Parties' Work to dimension from the principal lines.
- 1.3. make provisions to preserve all control points, such as monuments, stakes, bench marks or other datum points and shall replace at its own cost any of these which might be lost or displaced through its neglect.
- 1.4. examine the conditions under which the Work is to be installed, shall take field measurements and verify field conditions and shall carefully compare such field measurements and conditions and other information known to the Contractor with the Contract Documents before commencing activities. Any errors, inconsistencies, omissions, discrepancies or conditions detrimental to proper performance of the Work that are discovered shall be reported to CM at once. Contractors are not to proceed until the required corrections are accomplished.

2. Verification and Documentation

- 2.1. The exactness of grades, elevations, dimensions, or locations given on any Drawings issued by Architect or the work installed by other contractors, is not guaranteed by Owner or CM.
- 2.2. In all cases of interconnection of its Work with existing or other Work, it shall verify all dimensions relating to such existing or other Work. Any errors due to the Contractor's failure to verify all such grades, elevations, dimensions, or locations shall be promptly rectified by the Contractor without any additional cost to the Owner or CM..
- 2.3. As the Work progresses, the Contractor shall prepare lay out drawings showing the exact locations of Work under its Contract as a guide to all trades. Prior to any installation, the separate Contractors shall exchange layout drawings and coordinate the Work and be subject to verification by all subsequent Contractors.
- 2.4. Each Contractor shall be responsible to take such field measurements as may be required to determine the size of ordered material. In the event "guaranteed dimensions" are required, the Contractor shall promptly advise other Contractors through CM by use of drawings, templates or mock-ups of the required conditions.
- 2.5. All Work, and in particular, piping, ducts, conduit and similar items, shall be neatly and carefully laid out to provide the most useful space utilization and the most orderly appearance. Except as otherwise indicated or directed, piping and similar Work shall be installed as close to above ceiling floor slabs and walls as conditions reasonably permit, located to prevent interference with other Work or with the use of the spaces. Before Contractor installs a valve in an exposed location, it must make all efforts to install it in an accessible, concealed location. Contractors shall carefully plan the layout and review any questionable installations with CM.
- 2.6. The Owner or CM may utilize a registered land surveyor to verify alignment and layout of certain portions of the Work. If that Work is out of tolerance or incorrect, the installing Contractor will be responsible for prompt correction of the Work to comply with the Contract Documents, along with all expenses incurred by Owner or CM in such verification process, including, but not limited to, the cost for the surveying services, as well as the additional time expended by CM personnel at standard billing rates.

END OF SECTION 01530

SECTION 01540 CUTTING AND PATCHING

1 INSPECTION

- 1.01 Before cutting, examine surfaces to be cut, including elements subject to damage or movement during cutting and patching work. Report any unsatisfactory or questionable conditions to CM in writing.
- 1.02 Before proceeding, meet at the site with CM and the parties involved in cutting and patching, including mechanical and electrical trades. Review areas of potential interference, conflict and possible effects on the Owner's existing operations. Coordinate procedures, temporary support, methods of dust and water protection, etc. and resolve potential conflicts before proceeding.
- 1.03 When working in and around existing buildings, if any hazardous material is encountered or is suspected to be present, immediately notify CM and stop work in this area as described in Section 00840 Hazardous Materials until further direction is given by CM or the Owner.

2 PREPARATION

- 2.01 Provide adequate temporary support to assure the structural value and integrity of the affected portion of the work. Where specified or required, submit temporary support methodologies for approval.
- 2.02 Provide devices and methods to protect adjacent areas or other portions of the Project from damage including dust protection, water protection, and exposure.
- 2.03 Maintain excavations free of water.

3 EXECUTION

- 3.01 The use of gasoline powered equipment, jackhammers or power actuated tools, explosives is prohibited on this Project.
- 3.02 Each Contractor shall:
 - 3.02.1 On behalf of itself and its Subordinate Parties be responsible for the cutting of all holes and openings through existing walls, partitions, ceilings, floors and roofs as necessary for the installation of its Work. Holes and openings shall be neatly cut and of minimum size to allow the Work to be installed. Execute cutting and demolition by methods which will prevent damage to other Work, and will provide proper surfaces to receive installation of repairs.
 - 3.02.2 Execute work in such a manner as to minimize disruptions to or interference with the Owner's normal operations or functioning in the existing buildings and provide all means necessary to provide safety and convenience of those employed in and about the premises.
 - 3.02.3 Be responsible for patching of all holes and openings it makes. Fit work should be airtight to pipes, sleeves, ducts, conduit and other penetrations through surfaces. Patching is to match adjacent surfaces in materials and finish.
 - 3.02.4 Utilize only tradesmen skilled in the specific finish and material involved in making the patches. All patching is to be done in a neat and workmanlike manner to the satisfaction of CM. Defective Work shall be corrected at no cost to the Owner and CM.
 - 3.02.5 Do all necessary cutting and fitting required to make a satisfactory connection where new Work connects with existing so as to leave the entire Work in finished and workmanlike condition. Furnish all labor and materials to this end, whether or not shown or specified. All measurements must be verified at the site.
 - 3.02.6 Employ the original installer and fabricator, when possible, to perform cutting and patching for, weather-exposed or moisture-resistant elements, sight-exposed finished surfaces.
 - 3.02.7 Execute fitting and adjustment or products to provide a finished installation to comply with the specified products, functions, tolerances and finishes.

- 3.02.8 Restore Work which has been cut or removed and shall install new products to provide completed Work in accordance with the Contract Documents. Each Contractor will be responsible to pay the appropriate contractor as designated by CM for restoring any portion of the Project that is disturbed, including but not limited to, slabs, walls, ceilings, fire rated partitions, spray-on fireproofing, and finishes, to their original state as a result of Contractor's action.
- 3.02.9 Refinish entire surfaces as the Contractor's Work scope requires providing an even finish to match adjacent surfaces and finishes, for continuous surfaces, refinishing to nearest intersection, for an assembly, and refinish the entire unit.
- 3.02.10 Be held responsible for reckless cutting of holes in slabs, walls or other finishes, or for scraping off areas of fireproofing larger or greater than that which is necessary for installation of its Work.
- 3.03 Removal and replacement of ceilings not scheduled to be replaced shall be the responsibility of the Contractor requiring access.

END OF SECTION 01540

SECTION 01550
CLEAN-UP AND FINAL CLEANING

A. SUMMARY

Execute final cleaning at completion of the Work, as required by this Section. For Contractor's daily clean-up, dust control and rubbish removal operations during construction, refer to Section 01520 Temporary Construction Controls.

a. DISPOSAL REQUIREMENTS

- i. Conduct final cleaning and disposal operations to comply with codes, ordinances, regulations, and anti-pollution laws.
 - 1. Do not burn or bury rubbish and waste materials on Project site.
 - 2. Do not dispose of volatile wastes such as mineral spirits, oil or paint thinner in storm or sanitary drains.

2 PART 2 - SITE CLEAN-UP/RUBBISH REMOVAL PROCEDURE

2.1. REQUIREMENTS

2.1.1. General Contractor shall:

- 2.1.1.1. Be responsible for daily, weekly and final clean-up of its Work and the work of its Subordinate Parties as defined herein.
- 2.1.1.2. Comply with applicable labor agreements and jurisdictional rules in the hiring of laborers to perform its clean up obligations under the Contract Documents.
- 2.1.1.3. Control of dust generated by its operations on a daily basis.
- 2.1.1.4. Maintain roadways clear of all debris at all times.
- 2.1.1.5. Only use cleaning materials which will not create hazards to health or property and which will not damage surfaces. Only those cleaning materials and methods recommended by the manufacturer of the surface material to be cleaned shall be used.
- 2.1.1.6. Only use sweeping compounds that do not leave residue on concrete floor surfaces and that will not affect installation of finish flooring materials

2.1.2. Dumpsters:

- 2.1.2.1. Unless stated otherwise in the Work Scopes, the CM will provide and maintain the job site dumpsters for unidentifiable debris for use as specified below.
- 2.1.2.2. Each Contractor and its Subordinate Parties shall be responsible for daily clean-up, removal and placement in dumpsters of all debris and waste resulting from its operations.
- 2.1.2.3. No overfilling of dumpsters will be allowed. All adjacent areas are to be kept clean. Excavation, demolition, masonry, drywall and hazardous waste materials are NOT to be placed in CM's dumpster.
- 2.1.2.4. Each Contractor will be responsible for removing its own excavation, demolition, masonry, drywall and Hazardous Materials from the site in strict accordance with applicable laws and regulations regarding disposal.
- 2.1.2.5. Contractor shall indemnify, defend and hold harmless the Owner and CM from claims, damages, suits, costs, or expenses of any kind (including attorney's fees and costs) arising out of, resulting from or in connection with Contractor's misuse of dumpsters.

2.1.3. Daily Clean Up, Each Contractor shall:

- 2.1.3.1. Be responsible, DAILY for the clean -up, transport and removal from the site of identifiable debris including but not limited to, bulky debris, packaging, containers, unused materials and equipment, (i.e., masonry and concrete materials, drywall, steel, crates, carton, demolition debris, other packaging, and combustible items).
- 2.1.3.2. Leave no piles of debris in the building overnight. The cost of any overtime premium required to remove debris immediately at the end of each workday shall be included in the Contractor's Work.
- 2.1.3.3. handle materials in a controlled manner so that dust and other contaminants, do not affect the Owner's or other Contractor operations and equipment
- 2.1.3.4. Be responsible to leave its Work and work area in a clean condition. This includes, but is not limited to, removal of all grease, dust, dirt, stains, labels, fingerprints and other foreign matter.
- 2.1.4. Weekly Clean Up: Each Contractor shall:
 - 2.1.4.1. While on site, provide to CM one (1) person for each five tradesmen (or portion thereof) employed at the site, one day per week, for up to four (4) hours, for the exclusive purpose of performing overall project weekly clean-up of unidentifiable debris. The cost of this (these) person(s) shall be included in Contractor's Work.
 - 2.1.4.2. Include sweeping, loading and disposal of miscellaneous debris such as mud tracked through the building, drinking cups, bottles, lunch wrappers and other unidentifiable debris. Trash and debris from this operation shall be placed in the dumpster(s)
- 2.1.5. Final Clean Up:
 - 2.1.5.1. Final clean-up, will be done at a time designated by CM.
 - 2.1.5.2. Normally, Final Clean Up will occur before punchlist inspection or prior Owner Occupancy turnover.
 - 2.1.5.3. The Contractor's duties for Final Cleaning are:
 - 2.1.5.3.1. Prior to final completion or Owner occupancy, whichever occurs first, conduct an inspection of sight-exposed interior and exterior surfaces, and all Work areas, to verify that the entire Work is left in a broom clean condition and that all Final Cleaning as set forth above has been performed.
 - 2.1.5.3.2. Tunnels and closed off spaces shall be cleaned of packing boxes, wood frame members and other waste materials used in the construction.
 - 2.1.5.3.3. Temporary labels, stickers and similar items shall be removed from fixtures and equipment. Unless otherwise directed in the technical specifications, Contractors shall not remove permanent name plates, equipment model numbers, ratings, or other items intended to be permanently affixed to the fixture or equipment.
- 2.1.6. Use of Owner's Facilities: The Owner's facilities are not to be used by Contractor for the disposal of trash or debris from its Work.
- 2.1.7. Failure to perform Clean Up:
 - 2.1.7.1. If any Contractor or its Subordinate Parties fails to maintain a satisfactory clean-up program, CM will issue written notice, to the responsible Contractor, that the necessary clean-up must be performed within twenty-four (24) hours after the notice is given. The establishment of a definite deadline for the removal of debris and rubbish will supersede the necessity for any formal notification that such work must be done.

- 2.1.7.2. If Contractor(s) fail to perform the clean-up, by the deadline, CM may perform clean-up on the Project and back charge the responsible Contractor(s) for the costs. If necessary in order to remove unidentifiable debris beyond what is removed during weekly clean up, CM will perform such clean-up and shall pro-rate the cost among the Contractors in its discretion, based on Contractor(s) type of work and manpower on site. Back charges may be deducted from the monthly invoices of the Contractor(s) and/or final payment.
- 2.1.8. Hazardous Materials: Contractors or Subordinate Parties shall dispose of Hazardous Materials in strict accordance with applicable federal, state, and local laws and regulations. Hazardous Materials may not be placed in dumpsters and/or containers not so designated for such placement.

END OF SECTION 01550

SECTION 01600 FORMS

1 USE OF FORMS

- 1.01 Upon award of the Agreement, the various forms described and referenced in the Project Manual will be provided by CM and therefore are not bound in the Project Manual. Copies of forms are available for inspection at CM Office.
- 1.02 Following is a list of the key forms:
- 01250 Changes in the Work
 - PCO- Notice to Proceed
 - PCO- Quotation Only
 - Change Order Form (CMS.9.1 or CMS.9.2)
 - 01290 Payment Procedures
 - Application and Certificate for Payment (CON.27.1) and Continuation Sheet (CON.27.2)
 - Consent of Surety to Reduction In or Partial Release of Retainage (CON.26.6)
 - Payment schedule (PSI.10.1)
 - Payment Request for Stored Materials Form (CON.26.5)
 - Acknowledgment of Payment and Partial Unconditional Release Form (CON.26.3)
 - Unconditional Final Release and Waiver Subcontractor/Materialman Form (CON.26.4)
 - Sworn Statement Form (CON.26.2)
 - 01320 Communications
 - Trade Contractors Daily/Pre-Task Plan (CON.14.4)
 - Request for Information Form (CON.25.2) (in company approved software, if necessary)
 - 01330 Submittals
 - BMC Submittal Transmittal Form (CON.9.6)
 - 01400 Quality Requirements
 - Corrective Action Report (CAR)/Notice of Non-Conformance (NCR) (CON.18.2)
 - 01700 Contract Close-out
 - Consent of Surety Company to Final Payment Form (CON.26. 7)
 - Consent of Surety to Reduction in or Partial Release of Retainage Form (CON.26.6)
 - Certificate of Contract Completion Form (CLO.7.5)
 - 01720 Project Record Documents
 - Closeout Submittal (CLO.7.2)
 - 01740 Warranties and Guarantees
 - Contractor's Guarantee (CLO.7.3)
 - 01750 Systems Demonstration, Training and Start-up
 - Equipment/Systems Acceptance Form (CLO.2.1)
 - Owner Training Register (CLO.2.2)

END OF SECTION 01600

**SECTION 01630
PRODUCT SUBSTITUTIONS**

1. WORK INCLUDED

- 1.1. Furnish and install Products specified, under options and conditions for substitutions stated in this Section.

2. BIDDER'S OPTIONS

- 2.1. For products that are specified only by reference standard, select Product meeting that is standard by any manufacturer.
- 2.2. For Products specified by naming several Products or manufacturers, select any one of products and manufacturers named which complies with Specifications.
- 2.3. For Products specified by naming several Products or manufacturers and stating "or equivalent", or "or equal", or "or Architect approved equivalent", or similar wording, submit a request as for substitutions, for any Product or manufacturer which is not specifically named for review and approval by the Architect.
- 2.4. For Products specified by naming only one Product and manufacturer, there is no option and no substitution will be allowed.

3. SUBSTITUTION PROCESS

3.1. SUBSTITUTIONS

- 3.1.1. Base Bid shall be in accordance with the Contract Documents.
- 3.1.2. Substitutions for products may be made during the bidding period by submitting completed Substitution Request Form and substantiating product data/literature a minimum of ten (10) Days prior to Bid date to CM who will then forward to the Architect.
- 3.1.2.1. Architect will consider requests from the Bidder for substitution of products in place of those specified as set forth in this section.
- 3.1.2.2. Those submitted the specified calendar days prior to Bid Date will be included in an addendum if acceptable.
- 3.1.2.3. After the end of the bidding period, requests will be considered only in case of Product unavailability or other conditions beyond the control of Contractor.
- 3.1.2.4. Bid Proposals shall not be based on assumed acceptance of any item which has not been approved by addendum.
- 3.1.3. Bidders are required to submit a separate Substitution Request Form for each proposed substitution. Each substitution request should be accompanied by the following supporting documentation:
- 3.1.3.1. A full explanation of the proposed substitution.
- 3.1.3.2. Complete data substantiating compliance of the proposed substitution with the requirements stated in the Contract Documents.
- 3.1.3.2.1. Product identification, including the manufacturer's name and address.
- 3.1.3.2.2. Manufacturer's literature; identifying:
- 3.1.3.2.2.1. Product description and technical information.
- 3.1.3.2.2.2. Reference standards.
- 3.1.3.2.2.3. Performance and test data.
- 3.1.3.2.2.4. Installation instructions, operating procedures and other like information.
- 3.1.3.2.3. Samples, as applicable.

- 3.1.3.2.4. Names and addresses of similar projects on which product has been used, and date of each installation.
 - 3.1.3.3. Itemized comparison of the proposed substitution with the product specified, listing all significant variations.
 - 3.1.3.4. Data relating to changes in delivery or construction schedule.
 - 3.1.3.5. A list of all effects of the proposed substitution on separate contracts.
 - 3.1.3.6. Accurate cost data comparing the proposed substitution with the product specified.
 - 3.1.3.6.1. Amount of any net change to Contract Sum.
 - 3.1.3.7. Designation of required license fees or royalties.
 - 3.1.3.8. Designation of availability of maintenance services and sources of replacement materials.
 - 3.1.4. Substitutions will not be considered for acceptance when:
 - 3.1.4.1. They are indicated or implied on shop drawings or product data submittals without a formal request from Bidder.
 - 3.1.4.2. Acceptance will require substantial revision of Contract Documents.
 - 3.1.4.3. In judgment of Architect, do not include adequate information necessary for a complete evaluation.
 - 3.1.4.4. If requested after Contract Award directly by a subcontractor or supplier, except for special or unusual circumstances reviewed by the Contractor with CM.
 - 3.1.5. Substitute products shall not be ordered or installed without written acceptance of Architect.
 - 3.1.6. Architect will determine acceptability of proposed substitution.
- 3.2. BIDDER'S REPRESENTATION**
- 3.2.1. In making formal request for substitution the Bidder represents that:
 - 3.2.2. It has investigated the proposed product and has determined it is equivalent to or superior in all respects to the product specified.
 - 3.2.3. It will provide same warranties or bonds for the proposed substitution as required for the product specified.
 - 3.2.4. It will coordinate installation of the accepted substitution into the Work, and will make such changes as may be required for the Work to be complete in all respects.
 - 3.2.5. It waives all claims for additional costs caused by or arising from the substitution which may subsequently become apparent.
 - 3.2.6. Cost data is complete and includes related costs under its Agreement, but not:
 - 3.2.6.1. Costs under separate contracts.
 - 3.2.6.2. Architect's costs for redesign or revision of Contract Documents.
 - 3.2.7. Cost data need not be submitted, if request is for inclusion in an addendum. Requests after the Agreement is awarded shall contain a complete cost comparison.
 - 3.2.8. Any modifications necessary as a result of the use of an approved substitute shall be paid by the Contractor proposing the substitution.
 - 3.2.9. Any additional engineering costs required to be performed by the Architect to approve, implement or coordinate the substitution above reasonable review services, shall be paid by the Contractor proposing the substitution.

- 3.2.10. Under no circumstances will the Architect be required to prove that a product proposed for substitution is or is not equal to the quality of the product specified.

3.3. ARCHITECT'S DUTIES

- 3.3.1. Review requests for substitutions with reasonable promptness.
- 3.3.2. Coordinate review/approval of "Architect Approved" substitutions with the Owner prior to notifying the CM.
- 3.3.3. Issue a written instruction of decision to accept the substitution.
- 3.3.4. Substitution requests that are not approved will be returned to the party submitting the request with an explanation for the rejection.

3.4. SUBSTITUTION REQUEST FORM

- 3.4.1. The form is attached to this Section.
- 3.4.2. SUBSTITUTIONS WILL BE CONSIDERED ONLY WHEN THE ATTACHED FORM IS COMPLETED AND INCLUDED WITH THE SUBMITTAL WITH ALL BACKUP DATA.

SUBSTITUTION REQUEST FORM

TO: Barton Malow Company

We hereby submit for your consideration the following product instead of the specified item for the above Project:

DRAWING NO.: _____ **DRAWING NAME:** _____

SPEC. SECT.	SPEC. NAME	PARAGRAPH	SPECIFIED ITEM
_____	_____	_____	_____

Proposed Substitution:

Attached complete information on changes to Drawings and/or Specifications which proposed substitution will require for its proper installation.

Submit with request all necessary samples and substantiating data to prove equal quality and performance to that which is specified. Clearly mark manufacturer's literature to indicate equality in performance.

CERTIFICATION OF EQUAL PERFORMANCE AND ASSUMPTION OF LIABILITY FOR EQUAL PERFORMANCE

The undersigned states that the function, appearance and quality are equivalent or superior to the specified item.

Submitted by:

Signature_____
Title_____
Firm_____
Address_____
Telephone_____
Date

Signature shall be by person having authority to legally bind his/her firm to the above terms. Failure to provide legally binding signature will result in retraction of approval.

For use by Architect

☐ Accepted ☐ Accepted as noted
☐ Not accepted ☐ Received too late
☐ Insufficient data received

By: _____

Date: _____

For use by Owner

☐ Accepted ☐ Accepted as noted
☐ Not accepted ☐ Received too late
☐ Insufficient data received

By: _____

Date: _____

Fill in blanks below (attach additional sheets as required):

A. Does the Substitution affect dimensions shown on Drawings?

Yes _____ No _____ If yes, clearly indicate changes: _____

B. Will the undersigned pay for changes to the building design, including engineering and detailing costs caused by the requested substitution?

Yes _____ No _____ If no, fully explain: _____

C. What affect does substitution have on other contracts or other trades?

D. What affect does substitution have on the delivery and construction schedule? _____

E. Manufacturer's warranties of the proposed and specified items are: Same _____ Different _____

If different, explain on an attachment.

F. Reason for Request: _____

G. Itemized comparison of specified item(s) with the proposed substitution; list significant variations:

H. Accurate cost data comparing proposed substitution with product specified:

I. This substitution will amount to a credit or an extra cost to the Owner of:

_____ Dollars

(\$ _____)

END OF SECTION 01630

SECTION 01700 CONTRACT CLOSE-OUT

1. CLOSE-OUT PROCEDURE

- 1.1. The following procedure and forms will be used to sequentially progress through the contract close-out stage in a productive and timely manner.

1.1.1. **PREPARATION FOR CONTRACT CLOSE-OUT**

During the course of the Project, the Contractor will thoroughly review the Contract Documents as it relates to the requirements and obligations and gather and submit to CM the proper submittals, shop drawings, material certifications, waivers, certificates of insurance, bonds, and other contractual requirements impacting contract close-out.

1.1.2. **INITIATING THE FINAL CLOSE-OUT PROCESS**

When nearing 75% completion of the Work, the Contractor will review the status of the Close-Out process with CM. The Contractor's contractual responsibilities will be reviewed and outstanding close-out and other submittals identified.

1.1.3. **OBTAINING THE CERTIFICATE OF SUBSTANTIAL COMPLETION**

As the Contractor is nearing the completion of the Work and after concurrence with CM, it shall submit a written request for Substantial Completion, all required documentation as outlined, and a listing of all minor deficiencies yet to be completed.

The following documents are the minimum required at the time of request for Substantial Completion. Contractor shall also submit all additional documentation as required in the Contract Documents:

- 1.1.3.1. AIA G704 Certificate of Substantial Completion
- 1.1.3.2. As-built records
- 1.1.3.3. Operation and Maintenance Manuals
- 1.1.3.4. Keys, Maintenance Stock, and Spare Parts
- 1.1.3.5. Test and Start-up/Owner Training Sessions
- 1.1.3.6. Submission of Permits and Approvals (i.e. Fire Marshal, Department of Public Health Approvals, etc.)
- 1.1.3.7. Guarantee and Warranties
- 1.1.3.8. Punchlist (list of work to be completed or corrected)

Once CM has received all required documents they will be forwarded to the Architect and Owner. CM will review the Contractor's request for Substantial Completion; all above documentation, and list of deficiencies, add appropriate comments, and forward to the Architect and/or Owner for review. In conjunction with the Contractor, CM will establish a schedule for the completion of all listed items, which in no event shall exceed any time periods established in the Contract Documents for Final Completion.

When the Architect determines that the Work is substantially complete, the Certificate of Substantial Completion shall be issued to the Contractor.

1.1.4. **CONTRACTOR COMPLETES PUNCHLIST WORK**

Each Contractor shall submit a letter certifying all punchlist items are completed, in a manner acceptable to the Owner, CM and the Architect.

1.1.5. **FINAL INSPECTION NOTICE**

Each Contractor is to forward **(written notice and accompanying documentation)** to CM that Work is ready for final inspection and acceptance. CM will forward written notice to the Architect if CM is in agreement that Work is complete. The Architect will perform a final inspection and sign off on the punchlist form if Work is in fact completed. If punchlist work is not found complete, the Contractor shall take action to remedy any insufficiencies and then shall re-submit the written notice and accompanying documentation that Work is ready for **final** inspection and acceptance. If CM and/or Architect are required to perform more than 2 site visits to determine Substantial or Final Completion of Contractor's Work, the costs for such additional inspections shall be charged to Contractor.

The following documents are the minimum required to complete final payment. Contractor shall also submit all additional documentation as required in the Contract Documents:

- 1.1.5.1. Final Payment Request (on G702 & G703).
- 1.1.5.2. Guarantees/Warranties (including subs and suppliers).
- 1.1.5.3. Final Sworn Statements (including subs and suppliers).
- 1.1.5.4. Acknowledgment of Payment and Partial Unconditional Release
- 1.1.5.5. Final Release Subcontractor/Materialman
- 1.1.5.6. Certified Payroll Report (projects governed by prevailing wage laws)
- 1.1.5.7. Verification of Rate Classification and Payment (Federal projects)
- 1.1.5.8. Consent of Surety Company to Final Payment (AIA G707)
- 1.1.5.9. Consent of Surety to Reduction or Partial Release of Retainage (AIA G707A)
- 1.1.5.10. Certificate of Substantial Completion (on G704).
- 1.1.5.11. Completion and acceptance of all punchlist Work.

Items 1.1.5.2 through 1.1.5.5 must always be submitted with the final request for payment.

1.1.6. REVIEW OF FINAL PAYMENT REQUEST

CM and the Architect will review the Contractor's final payment request and Close-Out file. If all administrative documents are attached or have been submitted (i.e. guarantee, warranty, waiver of lien, etc.), all Work is complete, and all other responsibilities are met, the Project Team will forward the Contractor's Application for Final Payment to the Owner and payment shall be processed according to the Owner's regular procedures.

2. FINAL COMPLETION

- 2.1. To attain final completion, the Contractor shall complete activities pertaining to Substantial Completion, and complete Work on punch list items. Only then shall it issue written request to CM to conduct a site visit to determine Final Completion.
- 2.2. When Contractor considers the Work is finally complete, it shall submit written certification that:
 - 2.2.5. Contract Documents have been reviewed.
 - 2.2.6. Work has been inspected for compliance with Contract Documents.
 - 2.2.7. Work has been completed in accordance with Contract Documents.
 - 2.2.8. Equipment and systems have been tested in the presence of the Owner's representative and are operational.
 - 2.2.9. Work is completed and ready for final observation.
- 2.3. CM and/or Architect will make an observation to verify the status of completion with reasonable promptness after receipt of such certification.
- 2.4. Should CM and/or Architect consider that the Work is incomplete or defective:

- 2.4.5. CM will promptly notify the Contractor in writing, listing the incomplete or defective Work.
 - 2.4.6. Contractor shall take immediate steps to remedy the stated deficiencies, and send a second written certification to the CM that the Work is complete.
 - 2.4.7. CM and/or Architect will re-inspect the Work.
 - 2.5. When CM and/or Architect determines that the Work is acceptable under the Contract Documents, it shall request the Contractor to make close-out submittals.
3. CONTRACTOR'S CLOSE-OUT SUBMITTALS
- 3.1. Evidence of compliance with requirements of governing authorities (state, local or federal):
 - 3.1.5. Certificates of Inspection:
 - 3.1.5.1. Mechanical
 - 3.1.5.2. Electrical
 - 3.1.5.3. Others as required
 - 3.2. Project Record Documents: Refer to requirements of Section 01720.
 - 3.3. Operating and Maintenance Data, Instructions to Owner's Personnel: Refer to requirements of Section 01730.
 - 3.4. Warranties and Bonds: Refer to requirements of Individual Sections and Individual Technical Specifications and Section 01740.
 - 3.5. Spare Parts and Maintenance Materials: Refer to requirements of Individual Technical Specifications.
 - 3.6. Evidence of Payment and Release of Liens: Refer to requirements of General and Supplementary Conditions and Section 01290.

END OF SECTION 01700

SECTION 01720
PROJECT RECORD DOCUMENTS

1 SUMMARY

- 1.01 Each Contractor shall be responsible to maintain at the job site one copy of:
 - 1.01.1 Record Contract Drawings
 - 1.01.2 Record Project Manual
 - 1.01.3 Addenda
 - 1.01.4 Reviewed/Approved Shop Drawings
 - 1.01.5 Change Orders
 - 1.01.6 Other modifications to Contract
 - 1.01.7 Field test records
 - 1.01.8 Affidavits
- 1.02 Store documents apart from documents used for construction.
- 1.03 Maintain documents in clean, dry, legible condition.
- 1.04 Do not use project record documents for construction purposes.
- 1.05 Make documents available for inspection by the Owner, CM and the Architect.
- 1.06 Failure to maintain documents up-to-date will be cause for withholding payments to Contractor.
- 1.07 At the outset of the project, obtain from the Architect through the CM, at no charge to the Contractor, one complete set of Contract Documents including:
 - 1.07.1 Technical Specifications with all addenda.
 - 1.07.2 One complete set of prints of all Drawings.

2 RECORDING

- 2.01 Label each document "Project Record."
- 2.02 Keep record documents current.
- 2.03 Do not permanently conceal any work until required information has been recorded.
- 2.04 Contract Drawings:
 - 2.04.1 Contractor may at his option enter required information on a "working set" and then at completion of Project transfer the information to final submitted "Project Record" set.
 - 2.04.2 Contractor shall legibly mark to record actual construction:
 - 2.04.2.1 Depths of various elements of foundation in relation to survey data.
 - 2.04.2.2 Horizontal and vertical location of underground utilities and appurtenances referenced to permanent surface improvements.
 - 2.04.2.3 Location and depths of internal utilities and appurtenances concealed in construction referenced to visible and accessible features of structure.
 - 2.04.2.4 Field changes of dimension and detail.
 - 2.04.2.5 Changes made by PCO- Notice to Proceed.

2.04.2.6 Details not on original Contract Drawings.

2.05 Technical Specifications and Addenda:

2.05.1 Contractor shall legibly mark up each section to record:

2.05.1.1 Manufacturer, trade name, catalog number and Supplier of each product and item of equipment actually installed.

2.05.1.2 Changes made by PCO- Notice to Proceed.

2.05.1.3 Other items not originally specified.

2.06 Conversion of Schematic Layouts:

2.06.1 Arrangement of conduits, circuits, piping, ducts and similar items are in most cases shown schematically on the Drawings.

2.06.2 Contractor shall legibly mark to record actual construction:

2.06.2.1 Dimensions accurate to within 1" of the center of items shown schematically.

2.06.2.2 Identify each item, for example, "cast iron drain", "galvanized water", etc.

2.06.2.3 Identify location of each item, for example, "under slab", "in ceiling plenum", "exposed", etc.

2.06.3 The Owner, Architect or CM may waive requirements of schematic layout conversion, when in their opinion, it serves no beneficial purpose. Do not, however, rely on waivers being issued except as specifically issued by the CM in written form.

3 SUBMITTAL

3.01 At completion of Project deliver, 1 set of electronic sets of Record Documents, in a format acceptable to the Owner and the Architect, using the Final Document Submittal Form (in Section 01600 Forms), to CM prior to request for final payment.

3.02 Accompany submittal with transmittal letter, in duplicate, containing:

3.02.1 Date

3.02.2 Project title and number

3.02.3 Contractor's name and address

3.02.4 Title and number of each record document

3.02.5 Certification that each document as submitted is complete and accurate.

3.02.6 Signature of Contractor, or his authorized representative.

END OF SECTION 01720

**SECTION 01730
OPERATIONS AND MAINTENANCE DATA**

1. SCOPE

- 1.1. Compile product data and related information appropriate for Owner's maintenance and operation of products furnished under Contract.
- 1.2. Prepare operating and maintenance data as specified in this Section and as referenced in other pertinent sections of the Technical Specifications.
- 1.3. Instruct Owner's personnel in maintenance of products and in operation of equipment and systems in accordance with the requirements in Section 01750 Systems Demonstration, Training and Start-up.

2. QUALITY ASSURANCE

- 2.1. Preparation of data shall be done by personnel:
 - 2.1.1. Trained and experienced in maintenance and operation of described products.
 - 2.1.2. Familiar with requirements of this Section.
 - 2.1.3. Skilled as technical writer to the extent required to communicate essential data.
 - 2.1.4. Skilled as draftsman competent to prepare required drawings.

3. FORM OF SUBMITTALS

- 3.1. Prepare data in the form of an instructional manual for use by Owner's personnel.
- 3.2. Format:
 - 3.2.1. Size: 8-1/2" x 11"
 - 3.2.2. Paper: white, for typed pages.
 - 3.2.3. Text: Manufacturer's printed data, or neatly typewritten.
 - 3.2.4. Drawings:
 - a. Provide reinforced punched binder tab, bind in with text.
 - b. Fold larger drawings to size of text pages.
 - 3.2.5. Provide fly-leaf for each separate product, or each piece of operating equipment.
 - c. Provide typed description of product, and major component parts of equipment.
 - d. Provide indexed tabs.
 - 3.2.6. Cover: Identify each volume with typed or printed title "OPERATING AND MAINTENANCE INSTRUCTIONS." list:
 - e. Title of Project
 - f. Identity of separate structures as applicable.
 - g. Identity of general subject matter covered in the manual.
- 3.3. Binders:
 - 3.3.1. Commercial quality three-ring binders with durable and cleanable plastic covers.
 - 3.3.2. Maximum ring size: 3"
 - 3.3.3. When multiple binders are used, correlate the data into related consistent groupings.

4. CONTENT OF MANUAL

- 4.1. Neatly typewritten table of contents for each volume, arranged in systematic order.

- 4.1.1. Contractor, name of responsible principal, address and telephone number.
- 4.1.2. A list of each product required to be included, indexed to content of the volume.
- 4.1.3. List with each product, name, address and telephone number of:
 - a. Subcontractor or installer.
 - b. Maintenance contractor, as appropriate.
 - c. Identify area of responsibility of each.
 - d. Local source of supply for parts and replacement.
- 4.1.4. Identify each product by product name and other identifying symbols as set forth in Contract Documents.
- 4.2. Product Data:
 - 4.2.1. Include only those sheets which are pertinent to the specific product.
 - 4.2.2. Annotate each sheet to:
 - e. Clearly identify specific product or part installed.
 - f. Clearly identify data applicable to installation.
 - g. Delete references to inapplicable information.
- 4.3. Drawings:
 - 4.3.1. Supplement product data with drawings as necessary to clearly illustrate:
 - b. Relations of component parts or equipment and systems.
 - c. Control and flow diagrams.
 - 4.3.2. Coordinate drawings with information in Project Record Documents to assure correct illustration of completed installation.
 - 4.3.3. Contractor may use Project Record Documents as maintenance drawings - coordinate with CM.
- 4.4. Written text, as required to supplement product data for the particular installation:
 - 4.4.1. Organize in consistent format under separate headings for different procedures.
 - 4.4.2. Provide logical sequence of instructions for each procedure.
- 4.5. Copy of each warranty, bond and service contract issued.
 - 4.5.1. Provide information sheet for Owner's personnel, give:
 - a. Proper procedures in event of failure.
 - b. Instances which might affect validity of warranties or bonds.
- 5. MANUAL REVIEW AND PREPARATION SCHEDULE
 - 5.1. Submit two copies of preliminary draft of proposed formats and outlines of contents to CM prior to start of preparation.
 - 5.1.1. Architect will review draft and return one copy with comments.
 - 5.2. Submit 1 set of electronic copy of completed data in final form to the CM at least 2 months before the end of the project, for Owner review.
 - 5.2.1. Copy will be returned after final inspection or acceptance, with comments.
 - 5.3. Submit copies of completed operation and maintenance manuals at least two (2) weeks before execution and have at hand for use in demonstrations and instructions.

- 5.4. Submit specified number of copies of approved data in final form to the CM ten (10) days after final inspection or acceptance.

6. PRODUCTS

6.1. MANUAL FOR MATERIALS AND FINISHES

- 6.1.1. Submit 1 electronic copy of complete manual in final form.
- 6.1.2. Content, for architectural products, applied materials and finishes:
 - 6.1.2.1. Manufacturer's data, giving full information on products.
 - 6.1.2.1.1. Catalog number, size, and composition.
 - 6.1.2.1.2. Color and texture designations.
 - 6.1.2.1.3. Information required for reordering special-manufactured products.
 - 6.1.2.2. Instructions for care, maintenance and preventative maintenance.
 - 6.1.2.2.1. Manufacturer's recommendation for types of cleaning agents and methods.
 - 6.1.2.2.2. Cautions against cleaning agents and methods which are detrimental to product.
 - 6.1.2.2.3. Recommended schedule for cleaning and maintenance.
- 6.1.3. Content, for moisture-protection and weather-exposed products:
 - 6.1.3.1. Manufacturer's data, giving full information on products.
 - 6.1.3.1.1. Applicable standards.
 - 6.1.3.1.2. Chemical composition.
 - 6.1.3.1.3. Details of installation.
 - 6.1.3.2. Instructions for inspection, maintenance and repair.
- 6.1.4. Additional requirements for maintenance data: Reference sections of Technical Specifications.

6.2. MANUAL FOR EQUIPMENT AND SYSTEMS

- 6.2.1. Submit 1 electronic copy of complete manual in final form.
- 6.2.2. Content, for each unit of equipment and system, as appropriate:
 - 6.2.2.1. Description of unit and component parts.
 - 6.2.2.1.1. Function, normal operating characteristics, and limiting conditions.
 - 6.2.2.1.2. Performance curves, engineering data and tests.
 - 6.2.2.1.3. Complete nomenclature and commercial number of replaceable parts.
 - 6.2.2.2. Operating procedures:
 - 6.2.2.2.1. Start-up, break-in, routine and normal operating instructions.
 - 6.2.2.2.2. Regulation, control, stopping, shutdown and emergency instructions.
 - 6.2.2.2.3. Summer and winter operating instructions.
 - 6.2.2.2.4. Special operating instructions.
 - 6.2.2.3. Maintenance and Preventative Maintenance Procedures:
 - 6.2.2.3.1. Routine operations.
 - 6.2.2.3.2. Guide to "trouble-shooting".

- 6.2.2.3.3. Disassembly, repair and re-assemble.
 - 6.2.2.3.4. Alignment, adjusting and checking.
 - 6.2.2.4. Servicing and lubrication schedule.
 - 6.2.2.4.1. List of lubricants required.
 - 6.2.2.5. Manufacturer's printed operating and maintenance instructions.
 - 6.2.2.6. Description of sequence of operation by control manufacturer.
 - 6.2.2.7. Original manufacturer's parts, list, illustrations, assembly drawings and diagrams required for maintenance.
 - 6.2.2.7.1. Predicted life of parts subject to wear.
 - 6.2.2.7.2. Items recommended to be stocked as spare parts.
 - 6.2.2.8. As-installed control diagrams by controls manufacturer.
 - 6.2.2.9. Each Contractor's coordination drawings.
 - 6.2.2.9.1. As-installed color coded piping diagrams.
 - 6.2.2.10. Charts of valve tag numbers, with location and function of each valve.
 - 6.2.2.11. List of original manufacturer's spare parts, manufacturer's current prices, and recommended quantities to be maintained in storage.
 - 6.2.2.12. Other data as required under pertinent sections of specifications.
- 6.2.3. Content, for each electric and electronic system, as appropriate:
 - 6.2.3.1. Description of system and component parts.
 - 6.2.3.1.1. Function, normal operating characteristics and limiting conditions.
 - 6.2.3.1.2. Performance curves, engineering data and tests.
 - 6.2.3.1.3. Complete nomenclature and commercial number of replaceable parts.
 - 6.2.3.2. Circuit directories of panel boards.
 - 6.2.3.2.1. Electrical service.
 - 6.2.3.2.2. Controls.
 - 6.2.3.2.3. Communications.
 - 6.2.3.3. As-installed color coded wiring diagrams.
 - 6.2.3.4. Operating procedures:
 - 6.2.3.4.1. Routine and normal operating instructions.
 - 6.2.3.4.2. Sequences required.
 - 6.2.3.4.3. Special operating instructions.
 - 6.2.3.5. Maintenance and preventative maintenance procedures:
 - 6.2.3.5.1. Routine operations.
 - 6.2.3.5.2. Guide to "trouble-shooting".
 - 6.2.3.5.3. Disassembly, repair and re-assemble.
 - 6.2.3.5.4. Adjustment and checking.
 - 6.2.3.6. Manufacturer's printed operating and maintenance instructions.

- 6.2.3.7. List of original manufacturer's spare parts, manufacturer's current prices, and recommended quantities to be maintained in storage.
- 6.2.3.8. Other data as required under pertinent sections of specifications.
- 6.2.4. Prepare and include additional data when the need for such data becomes apparent during instruction of Owner's personnel.
- 6.2.5. Additional requirements for operating and maintenance data: Reference sections of Technical Specifications.

END OF SECTION 01730

SECTION 01740 WARRANTIES AND GUARANTEES

1 GENERAL

- 1.01 Disclaimers and Limitations: Manufacturer's disclaimers and limitations on product warranties do not relieve the Contractor of the warranty on the Work that incorporates the products. Manufacturer's disclaimers and limitations on product warranties do not relieve suppliers, manufacturers, and subcontractors required to countersign special warranties with the Contractor.

2 WARRANTY REQUIREMENTS

- 2.01 Deliver all written warranties and guarantees required by the Contract Documents with the Owner named as beneficiaries. All warranties shall include labor and materials, shall be signed by the manufacturer or subcontractor as the case may be, and countersigned by the Contractor. All written warranties shall be addressed to the Owner and delivered to CM upon completion of the Project, before or with the submission of Request for Final Payment.
- 2.02 In addition to all other warranties set forth in the Contract Documents or imposed by applicable law, Contractor warrants to Owner and CM that the Work will be free from defects and performed in strict conformity with the requirements of the Contract Documents. This warranty survives the termination of the Agreement and shall only be extinguished by limitation periods imposed by applicable law and shall not be limited by any other provisions contained in the Agreement, including any provisions or time periods related to Contractor's obligation to correct defective Work.
- 2.03 Contractor, upon signing the Agreement, shall obtain and forward to CM any and all Standard Product Warranties for products, materials and systems covered under its Agreement. The Manufacturer's warranties do NOT relieve the Contractor from its warranty obligations under the Contract Documents.
- 2.04 Special Warranties shall become effective on a date established by the Project Team. This date generally shall be the date of Final Completion of the Project or Substantial Completion of the Project or portions thereof as agreed upon by the Project Team. In the case of acceptance of a portion of the Work or Project, separate warranties shall be issued for those specific portions of the Project that were accepted, and shall be dated the date the specific portion was accepted. As additional Work is accepted, separate warranties for those specific portions of the Work shall be issued and properly dated. Issuance of warranties for a portion of the Work shall in no way become the basis for Application for Final Payment.
- 2.05 If for any reason, the Bidder cannot warrant any part of the Work using products, materials, or construction methods that have been specified or shown, it shall notify CM in writing at least ten (10) days before the bid submission date, giving reasons together with the names of products and data on substitutions it can guarantee. Should the Bidder fail to so notify CM within this time period, it will be bound to all warranties and guarantees as set forth in the Contract Documents.
- 2.06 Related Damages and Losses: In correcting Work that has been rejected as defective or otherwise failing to conform to the Contract Documents, whether before or after Substantial Completion, Contractor shall bear all related costs, including, but not necessarily limited to, the cost to correct the Work, the cost to correct all other Work that has been damaged by the defective or non-conforming Work, or that is damaged in the process of correcting the defective or nonconforming Work, and the cost of all additional testing and inspections and compensation for the Architect and/or CM's services and expenses made necessary thereby.
- 2.07 Reinstatement of Warranty: When Work covered by a warranty with a specific time period has failed and has been corrected by Contractor, the warranty shall be reinstated for a time period equal to the original warranty.
- 2.08 Express warranties are in addition to implied warranties and shall not limit the duties, obligations, rights, and remedies otherwise available to the Owner or CM under the law. Express warranty periods shall not be interpreted as limitations on the time in which Owner or CM may enforce Contractor's duties and obligation or their rights and remedies under the Agreement and applicable law.

2.08.1 Rejection of Warranties: The Owner and CM reserve the right to reject warranties and to limit selection to products with warranties not in conflict with requirements of the Contract Documents.

2.09 Where the Contract Documents require a Special Warranty, or similar commitment on the Work or part of the Work, the Owner and CM reserve the right to refuse to accept the Work, until the Contractor presents evidence that the entities required to countersign such commitments are willing to do so.

3 SUBMITTALS

3.01 Submit electronic copies of the warranties to the CM within fourteen (14) days of Substantial Completion using the form found in section 01600-Forms and organizing the warranty documents into an orderly sequence based on the table of contents of the Project Manual. If the project Team's Certificate of Substantial Completion designates a commencement date for warranties other than the date of Substantial Completion for the Work, or a designated portion of the Work, submit written warranties upon request of CM.

3.02 When the Contract Documents require Contractor, or Contractor and a Subordinate Party to execute a Special Warranty, prepare a written document that contains appropriate terms and identification, ready for execution by the required parties. Submit a draft to the CM for approval prior to final execution.

3.03 Forms for warranties are included in Section 01600-Forms. Prepare a written document utilizing the appropriate form, ready for execution by Contractor and its Subordinate Party(ies). Submit a draft to CM for approval prior to final execution.

END OF SECTION 01740

SECTION 01750
SYSTEMS DEMONSTRATION, TRAINING AND START-UP

2 GENERAL

- 2.01 COORDINATE Procedures for demonstration of equipment operation and instruction of Owner's personnel through CM.

3 QUALITY ASSURANCE

- 3.01 When specified in individual Sections, require manufacturer to provide authorized representative to demonstrate operation of equipment and systems, instruct Owner's personnel, and provide written report that demonstrations and instructions have been completed.
- 3.02 CM will provide list of personnel to receive instructions, and will coordinate their attendance at agreed-upon times.

4 SUBMITTALS

- 4.01 Submit preliminary schedule to CM for Architect's and Owner's approval, listing times and dates for demonstration of each item of equipment and each system, at least two (2) weeks prior to proposed dates.
- 4.02 Submit electronic copies of the reports within one week after completion of demonstrations, that demonstrations and instructions have been satisfactorily completed. Give time and date of each demonstration, and hours devoted to demonstration, with a list of persons present.

5 PREPARATION

- 5.01 Provide substantiating information that verifies equipment has been inspected and put into operation; testing, adjusting, and balancing has been performed; and equipment and systems are fully operational.
- 5.02 Submit copies of completed operation and maintenance manuals at least two (2) weeks before execution and have at hand for use in demonstrations and instructions.
- 5.03 CM will develop a schedule for the system demonstration, training, start-up and turn over of all systems and equipment.

6 DEMONSTRATION AND INSTRUCTIONS

- 6.01 Demonstrate operation and maintenance of equipment and systems to the Owner's, CM's and Architect's personnel two (2) weeks prior to date of final inspection. For equipment requiring seasonal operation, perform instructions for other seasons within six months. Contractor shall document the testing, equipment start-up and training sessions as required using the following forms in Section 01600 Forms:
- 6.01.1 Equipment/System Acceptance - This form will be completed for each piece of equipment or system for each contract that requires operational testing and/or training before acceptance. This will document the date of testing, the equipment tested, names of personnel which witnessed the testing and acceptance.
- 6.01.2 Owner Training Register - This form will be completed for each contract that requires training to be provided to the Owner's personnel. This will document the date of training, type of training, names of the personnel trained and acceptance of the training.
- 6.02 The amount of time required for instruction on each item of equipment and system is that specified in individual sections or as mutually agreed upon between Contractor and CM.
- 6.03 Demonstrate start-up, operation, control, adjustment, troubleshooting, servicing, maintenance, and shutdown of each item of equipment at agreed-upon times, at designated location.
- 6.04 Use operation and maintenance manuals as basis of instruction and review the contents of the manuals with personnel in full detail to explain all aspects of operations and maintenance.
- 6.05 Prepare and insert additional data in operations and maintenance manuals when need for additional data becomes apparent during instructions.

- 6.06 Contractor is responsible for video taping the training sessions. The videotape should be of professional quality and the Owner should be provided with three (3) copies of the videotape.

END OF SECTION 01750

SWORN AND NOTARIZED FAMILIAL DISCLOSURE STATEMENT

FAMILIAR DISCLOSURE AFFIDAVIT

The undersigned, the owner or authorized office of the below-named contractor (the ‘Contractor’), pursuant to the familial disclosure requirement provided in Troy Schools, hereby represents and warrants that, excepts as provided below, no familial relationship exists between the owner or key employee of the Contractor, and any member of the Troy School Board or the Troy School Superintendent. A list of the School District’s Board of Education Members and its Superintendent may found at <http://www.troy.k12.mi.us>.

List any Familial Relationships:

Contractor:

Print Name of Contractor

By: _____

Its: _____

Subscribed and sworn before me, this _____

Seal:

day of _____, 20____, a Notary Public

in and for _____ County, _____

(Signature)
NOTARY PUBLIC

My Commission expires _____

CERTIFICATION OF COMPLIANCE – IRAN ECONOMIC SANCTIONS ACT***Michigan Public Act No. 517 of 2012***

The undersigned, the owner, or authorized officer of the below-named Company, pursuant to the compliance certification requirement provided in Troy School District's Request For Proposal, the "RFP", hereby certifies, represents, and warrants that the Company and its officers, directors and employees, is not an "Iran Linked Business" within the meaning of the Iran Economic Sanctions Act, Michigan Public Act No. 517 of 2012 (the "Act"), and that in the event the Company is awarded a contract by Troy School District as a result of the aforementioned RFP, the Company is not and will not become an "Iran Linked Business" at any time during the course of performing any services under the contract.

The Company further acknowledges that any person who is found to have submitted a false certification is responsible for a civil penalty of not more than \$250,000.00 or two (2) times the amount of the contract or proposed contract for which the false certification was made, whichever is greater, the cost of Troy School District's investigation, and reasonable attorney fees, in addition to the fine. Moreover, any person who submitted a false certification shall be ineligible to bid on a request for proposal for three (3) years from the date the it is determined that the person has submitted the false certification.

Contractor:

Print Name of Contractor

By: _____

Its: _____

Subscribed and sworn before me, this _____ Seal:

day of _____, 20 _____, a Notary Public

in and for _____ County, _____

(Signature)
NOTARY PUBLIC

My Commission expires _____

END OF SECTION 00410



**BARTON MALOW COMPANY
CONTRACTOR
INSURANCE REQUIREMENTS**

For agency work
March 10, 2008

1. As a condition of performing work under the Agreement, Contractor will keep in force, at all times during performance of the Work, policies of insurance covering all Basic Insurance Requirements and any applicable Supplemental Insurance Requirements. The requirements identified below are minimum requirements. If the Agreement or other Contract Documents impose additional or higher standards, Contractor shall meet those as well. Where a Controlled Insurance Program ("CIP") is specified in the Contract Documents, these insurance requirements shall not apply to coverages supplied by the CIP, but shall apply to coverages which Contractor is required to carry outside the scope of the CIP.
2. **Basic Insurance Requirements**
 - 2.1. Workers' Compensation covering Contractor's statutory obligations in the State(s) in which the Work is to be performed or Federal statutory obligations, if applicable to the Project, and Employers' Liability insurance with limits of liability of \$1,000,000 EL Each Accident, EL Disease – Each Employee, and EL Disease – Policy Limit. Where applicable, a US Longshore and Harborworker's Compensation Act endorsement must be included.
 - 2.1.1. If Contractor employs the services of leased employees for the Work or for a portion of the Work, it will be required to submit evidence, to the satisfaction of Barton Malow Company, that such leased employees are fully covered by the minimum limits of Workers' Compensation and Employers' Liability Insurance. Such evidence shall include, but not be limited to, submission of the applicable leasing agreement.
 - 2.2. Automobile Liability insurance with the limit of \$1,000,000 per accident covering Contractor's owned, non-owned and hired automobiles.
 - 2.3. Commercial General Liability insurance written on the 1988 ISO OCCURRENCE policy form or subsequent versions with limits of liability as follows:

General Aggregate	\$ 2,000,000
Products-Completed Operations Aggregate	\$ 2,000,000
Personal/Advertising Injury	\$ 2,000,000
Each Occurrence	\$ 2,000,000

This coverage shall include coverage for premises-operations, independent contractors' protective, products and completed operations, personal injury and broad form property damage (including coverage for explosion, collapse, and underground hazards), and Contractual Liability protection with respect to Contractor's indemnification obligations under the Contract Documents. Products-completed operations coverage must be maintained for at least two years after final completion of the Project.

3. **Supplemental Insurance Requirements**
 - 3.1. Watercraft Protection and Indemnity Liability insurance if any of the Work is on or over navigable waterways or involves use of any vessel. Limits are to be approved by Barton Malow Company in writing.
 - 3.2. Aircraft Liability insurance if any aircraft is used in performance of the Work. Limits are to be approved by Barton Malow Company in writing.
 - 3.3. Railroad Protective Liability insurance if any of the Work is on or within 50 feet of any railroad or affects railroad property, including but not limited to tracks, bridges, tunnels, and switches. Limits are to be approved by Barton Malow Company in writing.
 - 3.4. Professional Liability insurance, if Professional Services are provided, with limits of liability as follows:

Each Claim	\$ 5,000,000
Aggregate	\$ 5,000,000

Provided, however, that if the Subcontract Price is \$10,000,000 or less, then the following limits of liability shall apply:

Each Claim	\$ 2,000,000
Aggregate	\$ 2,000,000

Contractor shall keep such Professional Liability insurance in force during the Agreement, and for three years after final completion of the Project.

- 3.5. Pollution Liability insurance, which must be on an occurrence basis, if Environmental Services are provided. "Environmental Services" means any abatement, removal, remediation, transporting, or disposal of a Hazardous Material, or any assessments or consulting relating to same. Limits of liability for Pollution Liability insurance shall be as follows:

Each Occurrence	\$ 5,000,000
Aggregate	\$ 5,000,000

4. General Provisions

- 4.1. Every policy must be written by an insurance company licensed in the state where work is being done and is reasonably acceptable to Barton Malow Company and Owner.
- 4.2. Limits for Employer's Liability, Commercial General Liability and Automobile Liability may be attained by a combination of an underlying policy with an umbrella or excess liability policy.
- 4.3. "Barton Malow Company," Owner, and all other entities as required in the Contract Documents shall be endorsed as additional insureds on Contractor's liability insurance (including general liability, excess liability, automobile liability and pollution liability, where applicable) with respect to liability arising out of activities, "operations" or "work" performed by or on behalf of Contractor, including Barton Malow Company's general supervision of Contractor, products and completed operations of Contractor, and automobiles owned, leased, hired or borrowed by Contractor. The coverage provided by the additional insured endorsement shall be at least as broad as the Insurance Service Office, Inc.'s Additional Insured, Form B CG 20 10 11 85 or CG 20 26 11 85. Forms that do not provide additional insured status for completed operations will not be accepted. In no case shall any additional insured endorsement exclude coverage for Barton Malow Company's or Owner's own negligence nor limit coverage for Barton Malow Company or Owner only to potential liability incurred solely as a result of Barton Malow Company's or Owner's acts or omissions. Furthermore, nothing in the additional insured endorsement shall limit Barton Malow Company's or Owner's products-completed operations coverage to only those liabilities arising from Contractor's "ongoing operations".
- 4.4. Contractor will furnish, before any work is started, certificates of insurance and copies of any additional insured endorsements for Contractor's liability policies showing the required coverages. Receipt by Barton Malow Company of a non-conforming certificate of insurance without objection, or Barton Malow Company's failure to collect a certificate of insurance, shall not waive or alter Contractor's duty to comply with the insurance requirements. Modifications to these insurance requirements will not be effective unless made in a writing executed by an authorized representative of Barton Malow Company. Upon written request by Barton Malow Company, Contractor will provide copies of its insurance policies.
- 4.5. Evidence of the required insurance is to be provided to Barton Malow Company on ACORD Certificate Form 25-S and must indicate:
- 4.5.1. Any coverage exclusions or deviations from the 1988 ISO commercial general liability form or subsequent versions;
- 4.5.2. A Best's rating for each insurance carrier at A minus VII or better;
- 4.5.3. That the issuing insurance company will provide thirty (30) days written notice of cancellation to the certificate holder and the words "endeavor to" and "but failure to mail such notice shall impose no obligation or liability of any kind upon the company, its agents or representatives" do not apply or have been removed;
- 4.5.4. That additional insured endorsements have been provided as required under the Contract Documents; and
- 4.5.5. Any deductibles over \$10,000 applicable to any coverage.
- 4.6. All coverage must be primary and not excess over or contributory with any other valid, applicable, and collectible insurance or self-insurance in force for Barton Malow Company, Owner, or other additional insureds.
- 4.7. Contractor will provide full coverage for all of Contractor's equipment, property and tools used in the Work.
- 4.8. Contractor shall waive, and shall require (by endorsement or otherwise) its insurers providing the coverage required by these insurance requirements to waive, subrogation rights against Barton Malow Company, Owner, and all other additional insureds for losses and damages incurred and/or paid under the insurance policies required by these insurance requirements or other insurance applicable to Contractor or its Subordinate Parties, and will include this same requirement in contracts with its Subordinate Parties. If the policies of insurance referred to in this paragraph require an endorsement to provide for continued coverage where there is a waiver of subrogation, the owners of such policies will cause them to be so endorsed.

- 4.9. Contractor will send or fax a copy of these insurance requirements to its agent when an insurance certificate is requested to assure that the policies comply with the insurance requirements.
- 4.10. If Contractor requires its Subordinate Parties to provide additional insured endorsements in favor of Contractor, those endorsements shall be extended to Barton Malow Company, Owner and all other required additional insureds.
- 4.11. Contractor's duty to provide the insurance coverage set forth in these insurance requirements is a severable obligation from Contractor's indemnification obligations under the Contract Documents. Nothing in these insurance requirements shall be deemed to limit Contractor's liability under the Agreement.
- 4.12. If these insurance requirements are used in conjunction with a Project where an Affiliated Company of Barton Malow Company is acting as Construction Manager, Design Builder or otherwise (the "Construction Entity"), the term "Barton Malow Company" as used in these insurance requirements shall be deemed to be replaced with the name of the Construction Entity, and the additional insured requirements of Section 4.3 above shall be amended to include "Barton Malow Company", and all partners and/or members of the Construction Entity as applicable. "Affiliated Company" means any entity in which Barton Malow Company has an ownership interest.

END OF DOCUMENT PRO 15-14

4. BOND REQUIREMENTS

4.1. PERFORMANCE BONDS AND PAYMENT BONDS

- 4.1.1. Troy School District will, require Contractor to furnish a Performance Bond and a Payment Bond, in amounts equal to the Agreement price, by a qualified surety naming both the Owner and CM as Obligees. All sureties providing bonds on this Project must be listed in the Department of Treasury's Circular 570, entitled "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" with the bond amounts less than or equal to the underwriting limitation indicated in the Circular, and/or must have an A.M. Best rating of A – VII or better. Bonds shall be duly executed by the Contractor, as principal, and by a surety that is licensed in the state in which the Work is to be performed.
- 4.1.2. The Contractor shall deliver the required bonds to CM prior to execution of the Agreement. If the Work is to be commenced prior thereto in response to a letter of intent, the Bidder, at a minimum, shall submit evidence to the satisfaction of CM that such bonds will be furnished prior to commencement of on-site Work. In no event may the Contractor commence on-site Work without the required bonds properly issued and delivered.
- 4.1.3. Performance Bond and Payment Bond unmodified form AIA Document or A312 (1984 Edition) must be used for this Project.
- 4.1.4. The Bidder's proposed surety must be acceptable to the Owner and CM. If, at any time, after acceptance of the Contractor's bonds, the surety fails to meet the stated criteria Contractor must, as a precondition to continuing Work and receiving further payments, replace the bonds with bonds from a surety that meets the stated criteria.
- 4.1.5. The Performance and Payment Bond penal sums (i.e., the Agreement price) must be listed as a separate line item in the schedule of values.
- 4.1.6. In the event of a Change Order, the penal sum of any required Performance and Payment Bonds shall be adjusted to equal the adjusted Contract Price. CM or Owner shall have the right to request submission of bond riders, issued by the original qualified surety, evidencing that such adjustments to the penal sum of the bonds have been accomplished. Notwithstanding the foregoing, in the next pay application after the Agreement price has been increased by twenty-five percent (25%) or more, as a condition precedent to payment, Contractor shall deliver a bond rider issued by the original qualified surety evidencing that the appropriate adjustment in penal sums has been accomplished.

END OF SECTION 00500

**BARTON MALOW COMPANY
CONTRACTOR
INSURANCE REQUIREMENTS**

For agency work
March 10, 2008

1. As a condition of performing work under the Agreement, Contractor will keep in force, at all times during performance of the Work, policies of insurance covering all Basic Insurance Requirements and any applicable Supplemental Insurance Requirements. The requirements identified below are minimum requirements. If the Agreement or other Contract Documents impose additional or higher standards, Contractor shall meet those as well. Where a Controlled Insurance Program ("CIP") is specified in the Contract Documents, these insurance requirements shall not apply to coverages supplied by the CIP, but shall apply to coverages which Contractor is required to carry outside the scope of the CIP.
2. **Basic Insurance Requirements**
 - 2.1. Workers' Compensation covering Contractor's statutory obligations in the State(s) in which the Work is to be performed or Federal statutory obligations, if applicable to the Project, and Employers' Liability insurance with limits of liability of \$1,000,000 EL Each Accident, EL Disease – Each Employee, and EL Disease – Policy Limit. Where applicable, a US Longshore and Harborworker's Compensation Act endorsement must be included.
 - 2.1.1. If Contractor employs the services of leased employees for the Work or for a portion of the Work, it will be required to submit evidence, to the satisfaction of Barton Malow Company, that such leased employees are fully covered by the minimum limits of Workers' Compensation and Employers' Liability Insurance. Such evidence shall include, but not be limited to, submission of the applicable leasing agreement.
 - 2.2. Automobile Liability insurance with the limit of \$1,000,000 per accident covering Contractor's owned, non-owned and hired automobiles.
 - 2.3. Commercial General Liability insurance written on the 1988 ISO OCCURRENCE policy form or subsequent versions with limits of liability as follows:

General Aggregate	\$ 2,000,000
Products-Completed Operations Aggregate	\$ 2,000,000
Personal/Advertising Injury	\$ 2,000,000
Each Occurrence	\$ 2,000,000

This coverage shall include coverage for premises-operations, independent contractors' protective, products and completed operations, personal injury and broad form property damage (including coverage for explosion, collapse, and underground hazards), and Contractual Liability protection with respect to Contractor's indemnification obligations under the Contract Documents. Products-completed operations coverage must be maintained for at least two years after final completion of the Project.
3. **Supplemental Insurance Requirements**
 - 3.1. Watercraft Protection and Indemnity Liability insurance if any of the Work is on or over navigable waterways or involves use of any vessel. Limits are to be approved by Barton Malow Company in writing.
 - 3.2. Aircraft Liability insurance if any aircraft is used in performance of the Work. Limits are to be approved by Barton Malow Company in writing.
 - 3.3. Railroad Protective Liability insurance if any of the Work is on or within 50 feet of any railroad or affects railroad property, including but not limited to tracks, bridges, tunnels, and switches. Limits are to be approved by Barton Malow Company in writing.
 - 3.4. Professional Liability insurance, if Professional Services are provided, with limits of liability as follows:

Each Claim	\$ 5,000,000
Aggregate	\$ 5,000,000

Provided, however, that if the Subcontract Price is \$10,000,000 or less, then the following limits of liability shall apply:

Each Claim	\$ 2,000,000
Aggregate	\$ 2,000,000

Contractor shall keep such Professional Liability insurance in force during the Agreement, and for three years after final completion of the Project.
 - 3.5. Pollution Liability insurance, which must be on an occurrence basis, if Environmental Services are provided. "Environmental Services" means any abatement, removal, remediation, transporting, or disposal of a Hazardous Material, or any assessments or consulting relating to same. Limits of liability for Pollution Liability insurance shall be as follows:

Each Occurrence	\$ 5,000,000
Aggregate	\$ 5,000,000
4. **General Provisions**
 - 4.1. Every policy must be written by an insurance company licensed in the state where work is being done and is reasonably acceptable to Barton Malow Company and Owner.
 - 4.2. Limits for Employer's Liability, Commercial General Liability and Automobile Liability may be attained by a combination of an underlying policy with an umbrella or excess liability policy.

- 4.3. "Barton Malow Company," Owner, and all other entities as required in the Contract Documents shall be endorsed as additional insureds on Contractor's liability insurance (including general liability, excess liability, automobile liability and pollution liability, where applicable) with respect to liability arising out of activities, "operations" or "work" performed by or on behalf of Contractor, including Barton Malow Company's general supervision of Contractor, products and completed operations of Contractor, and automobiles owned, leased, hired or borrowed by Contractor. The coverage provided by the additional insured endorsement shall be at least as broad as the Insurance Service Office, Inc.'s Additional Insured, Form B CG 20 10 11 85 or CG 20 26 11 85. Forms that do not provide additional insured status for completed operations will not be accepted. In no case shall any additional insured endorsement exclude coverage for Barton Malow Company's or Owner's own negligence nor limit coverage for Barton Malow Company or Owner only to potential liability incurred solely as a result of Barton Malow Company's or Owner's acts or omissions. Furthermore, nothing in the additional insured endorsement shall limit Barton Malow Company's or Owner's products-completed operations coverage to only those liabilities arising from Contractor's "ongoing operations".
- 4.4. Contractor will furnish, before any work is started, certificates of insurance and copies of any additional insured endorsements for Contractor's liability policies showing the required coverages. Receipt by Barton Malow Company of a non-conforming certificate of insurance without objection, or Barton Malow Company's failure to collect a certificate of insurance, shall not waive or alter Contractor's duty to comply with the insurance requirements. Modifications to these insurance requirements will not be effective unless made in a writing executed by an authorized representative of Barton Malow Company. Upon written request by Barton Malow Company, Contractor will provide copies of its insurance policies.
- 4.5. Evidence of the required insurance is to be provided to Barton Malow Company on ACORD Certificate Form 25-S and must indicate:
- 4.5.1. Any coverage exclusions or deviations from the 1988 ISO commercial general liability form or subsequent versions;
- 4.5.2. A Best's rating for each insurance carrier at A minus VII or better;
- 4.5.3. That the issuing insurance company will provide thirty (30) days written notice of cancellation to the certificate holder and the words "endeavor to" and "but failure to mail such notice shall impose no obligation or liability of any kind upon the company, its agents or representatives" do not apply or have been removed;
- 4.5.4. That additional insured endorsements have been provided as required under the Contract Documents; and
- 4.5.5. Any deductibles over \$10,000 applicable to any coverage.
- 4.6. All coverage must be primary and not excess over or contributory with any other valid, applicable, and collectible insurance or self-insurance in force for Barton Malow Company, Owner, or other additional insureds.
- 4.7. Contractor will provide full coverage for all of Contractor's equipment, property and tools used in the Work.
- 4.8. Contractor shall waive, and shall require (by endorsement or otherwise) its insurers providing the coverage required by these insurance requirements to waive, subrogation rights against Barton Malow Company, Owner, and all other additional insureds for losses and damages incurred and/or paid under the insurance policies required by these insurance requirements or other insurance applicable to Contractor or its Subordinate Parties, and will include this same requirement in contracts with its Subordinate Parties. If the policies of insurance referred to in this paragraph require an endorsement to provide for continued coverage where there is a waiver of subrogation, the owners of such policies will cause them to be so endorsed.
- 4.9. Contractor will send or fax a copy of these insurance requirements to its agent when an insurance certificate is requested to assure that the policies comply with the insurance requirements.
- 4.10. If Contractor requires its Subordinate Parties to provide additional insured endorsements in favor of Contractor, those endorsements shall be extended to Barton Malow Company, Owner and all other required additional insureds.
- 4.11. Contractor's duty to provide the insurance coverage set forth in these insurance requirements is a severable obligation from Contractor's indemnification obligations under the Contract Documents. Nothing in these insurance requirements shall be deemed to limit Contractor's liability under the Agreement.
- 4.12. If these insurance requirements are used in conjunction with a Project where an Affiliated Company of Barton Malow Company is acting as Construction Manager, Design Builder or otherwise (the "Construction Entity"), the term "Barton Malow Company" as used in these insurance requirements shall be deemed to be replaced with the name of the Construction Entity, and the additional insured requirements of Section 4.3 above shall be amended to include "Barton Malow Company", and all partners and/or members of the Construction Entity as applicable. "Affiliated Company" means any entity in which Barton Malow Company has an ownership interest.

DRAFT AIA® Document A232™ – 2009

General Conditions of the Contract for Construction, Construction Manager as Adviser Edition

for the following PROJECT:

(Name, and location or address)

<< >>
<< >>

THE CONSTRUCTION MANAGER:

(Name, legal status and address)

<< >>< >>
<< >>

THE OWNER:

(Name, legal status and address)

<< >>< >>
<< >>

THE ARCHITECT:

(Name, legal status and address)

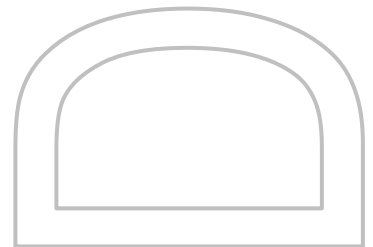
<< >>< >>
<< >>

ADDITIONS AND DELETIONS:

The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

This document is intended to be used in conjunction with AIA Documents A132™-2009, Standard Form of Agreement Between Owner and Contractor, Construction Manager as Adviser Edition; B132™-2009, Standard Form of Agreement Between Owner and Architect, Construction Manager as Adviser Edition; and C132™-2009, Standard Form of Agreement Between Owner and Construction Manager as Adviser.



ELECTRONIC COPYING of any portion of this AIA® Document to another electronic file is prohibited and constitutes a violation of copyright laws as set forth in the footer of this document.

TABLE OF ARTICLES

1	GENERAL PROVISIONS
2	OWNER
3	CONTRACTOR
4	ARCHITECT AND CONSTRUCTION MANAGER
5	SUBCONTRACTORS
6	CONSTRUCTION BY OWNER OR BY OTHER CONTRACTORS
7	CHANGES IN THE WORK
8	TIME
9	PAYMENTS AND COMPLETION
10	PROTECTION OF PERSONS AND PROPERTY
11	INSURANCE AND BONDS
12	UNCOVERING AND CORRECTION OF WORK
13	MISCELLANEOUS PROVISIONS
14	TERMINATION OR SUSPENSION OF THE CONTRACT
15	CLAIMS AND DISPUTES



INDEX

(Topics and numbers in bold are section headings.)

Acceptance of Nonconforming Work

9.6.6, 9.9.3, **12.3**

Acceptance of Work

9.6.6, 9.8.2, 9.9.3, 9.10.1, 9.10.3, **12.3**

Access to Work

3.16, 6.2.1, **12.1**

Accident Prevention

10

Acts and Omissions

3.2.1, 3.2.2, 3.3.2, 3.12.8, 3.18, 8.3.1, 9.5.1, 10.1, 10.2.5, 13.4.2, **13.7**

Addenda

1.1.1, 3.11, 4.2.14

Additional Costs, Claims for

3.2.4, 3.7.4, 3.7.5, 6.1.1, 7.3, 9.10.3, 9.10.4, 10.3, 10.4, 15.1.4

Additional Inspections and Testing

4.2.8, 12.2.1, **13.5**

Additional Insured

11.1.4

Additional Time, Claims for

3.7.4, 3.7.5, 6.1.1, 7.3, 8.3, **10.3**

Administration of the Contract

3.10, **4.2**

Advertisement or Invitation to Bid

1.1.1

Aesthetic Effect

4.2.19

Allowances

3.8, 7.3.8

All-risk Insurance

11.3.1, 11.3.1.1

Applications for Payment

4.2.7, 4.2.15, 7.3.9, 9.2, **9.3**, 9.4, 9.5.1, 9.7, 9.8.3, 9.10.1, 9.10.3, 9.10.5, 11.1.3, 14.2.4

Approvals

2.1.1, 2.2.2, 2.4, 3.1.4, 3.10.1, 3.10.2, 3.12.4 through 3.12.10, 3.13.2, 3.15.2, 4.2.9, 9.3.2, 13.4.2, **13.5**

Arbitration

8.3.1, 11.3.10, 13.1, 15.3.2, **15.4**

ARCHITECT

4

Architect, Certificates for Payment

9.4

Architect, Definition of

4.1.1

Architect, Extent of Authority

5.2, 7.1.2, 7.3.7, 7.4, 9.3.1, 9.4, 9.5, 9.8.3, 9.8.4, 9.10.1, 9.10.3, 12.1, 12.2.1, 13.5.1, 13.5.2, 15.1.3, 15.2.1

Architect, Limitations of Authority and Responsibility

2.1.1, 3.12.8, 4.2.1, 4.2.2, 4.2.8, 4.2.13, 5.2.1, 9.6.4, **15.2**

Architect's Additional Services and Expenses

2.4, 11.3.1.1, 12.2.1, 12.2.4, 13.5.2

Architect's Administration of the Contract

4.2, 9.4, 9.5, **15.2**

Architect's Approvals

3.12.8

Architect's Authority to Reject Work

4.2.8, 12.1.2, 12.2.1

Architect's Copyright

1.5

Architect's Decisions

4.2.8, 7.3.9, 7.4, 8.1.3, 8.3.1, **9.2**, 9.4, 9.5, 9.8.3, 9.9.2, 13.5.2, 14.2.2, 14.2.4, **15.2**

Architect's Inspections

3.7.4, 4.2, 9.8.3, 9.9.2, 9.10.1, **13.5**

Architect's Instructions

3.2.4, 7.4, 9.4

Architect's Interpretations

4.2.8, 4.2.17, 4.2.18

Architect's On-Site Observations

4.2.2, 9.4, 9.5.1, 9.10.1, 12.1.1, 12.1.2, **13.5**

Architect's Project Representative

4.2.16

Architect's Relationship with Contractor

1.1.2, 1.5, 3.2.2, 3.2.3, 3.2.4, 3.3.1, 3.4.2, 3.5, 3.7.4, 3.9.2, 3.9.3, 3.10, 3.11, 3.12.8, 3.16, 3.18, 4.2, 5.2, 6.2.2, 8.2, 11.3.7, 12.1, **13.5**

Architect's Relationship with Construction Manager

1.1.2, 9.3 through 9.10, 10.3, 13.5.1, 10.3, 11.3.7, 13.4.2, **13.5.4**

Architect's Relationship with Subcontractors

1.1.2, 4.2.8, 5.3, 9.6.3, 9.6.4

Architect's Representations

9.4, 9.5, 9.10.1

Architect's Site Visits

4.2.2, 9.4, 9.5.1, 9.8.3, 9.9.2, 9.10.1, **13.5**

Asbestos

10.3.1

Attorneys' Fees

3.18.1, 9.10.2, 10.3.3

Award of Other Contracts

6.1.1, 6.1.2

Award of Subcontracts and Other Contracts for Portions of the Work

5.2

Basic Definitions

1.1

Bidding Requirements

1.1.1, 5.2.1, 11.4.1

Binding Dispute Resolution

9.7, 11.3.9, 11.3.10, 13.1, 15.2.5, 15.2.6.1, 15.3.1, 15.3.2, 15.4.1

Boiler and Machinery Insurance

11.3.2

BONDS, INSURANCE AND

11

Bonds, Lien

7.3.7.4, 9.10.3

Bonds, Performance and Payment

7.3.7.4, 9.6.7, 9.10.3, 11.3.9, 11.4

Building Permit

2.2.2, 3.7.1

Capitalization

1.3

Certificate of Substantial Completion

9.8.3, 9.8.4, 9.8.5

Certificates for Payment

4.2.2, 9.3.3, **9.4**, 9.5, 9.6.1, 9.6.6, 9.7, 9.10.1, 9.10.3, 15.1.3

Certificates of Inspection, Testing or Approval

13.5.4

Certificates of Insurance

9.3.2, 9.10.2, 11.1.3

Change Orders

1.1.1, 2.4, 3.4.2, 3.7.4, 3.8.2, 3.11, 3.12.8, 4.2.12, 4.2.13, 4.2.14, 5.2.3, 7.1.1, 7.1.2, **7.2**, 7.3.2, 7.3.4, 7.3.6, 7.3.9, 7.3.10, 8.3.1, 9.3.1.1, 9.10.3, 10.3.2, 11.3.1.2, 11.3.4, 11.3.9, 12.1.2, 15.1.3

Change Orders, Definition of

7.2

Changes

7.1

CHANGES IN THE WORK

2.2.1, 3.4.2, 3.11, 3.12.8, 4.2.13, 4.2.14, **7**, 8.3.1, 9.3.1.1

Claims, Definition of

15.1.1

CLAIMS AND DISPUTES

1.1.8, 3.2.4, 3.7.5, 6.1.1, 7.3.9, 8.3.2, 9.3.3, 9.10.3, 9.10.4, 10.3.3, **15**, 15.4

Claims for Additional Cost

3.2.4, 3.7.5, 6.1.1, 7.3.9, 9.10.3, 9.10.4, 10.3.2, 10.4, **15.1.4**

Claims for Additional Time

3.2.4, 3.7.5, **7**, 8.3.2, 10.4, **15.1.5**

Concealed or Unknown Conditions, Claims for

3.7

Claims for Damages

3.2.4, 3.18, 6.1.1, 6.2.5, 8.3.2, 9.3.3, 9.5.1.2, 9.10.2, 9.10.5, 10.3.3, 11.1.1, 11.3.5, 11.3.7, 15.1.6

Cleaning Up

3.15, 6.3

Commencement of Statutory Limitation Period

13.7

Commencement of the Work, Definition of

8.1.2

Communications, Owner to Architect

2.2.6

Communications, Owner to Construction Manager

2.2.6

Communications, Owner to Contractor

2.2.6

Communications Facilitating Contract Administration

3.9.1, **4.2.6**

COMPLETION, PAYMENTS AND

Completion, Substantial

4.2.15, 8.1.1, 8.1.3, 8.2.3, 9.4.3.3, **9.8**, 9.9.1, 9.10.3, 12.2.1, 12.2.2, 13.7

Concealed or Unknown Conditions

3.7.4, 4.2.8, 8.3.1, 10.3

Conditions of the Contract

1.1.1

Consolidation or Joinder

15.4.4

CONSTRUCTION BY OWNER OR BY OTHER CONTRACTORS

1.1.4, **6**

Construction Change Directive, Definition of

7.3.1

Construction Change Directives

1.1.1, 3.4.2, 3.12.8, 4.2.12, 4.2.13, 7.1.1, 7.1.2, 7.1.3, **7.3**, 9.3.1.1

Construction Manager, Building Permits

2.2.2

Construction Manager, Communications through

4.2.6

Construction Manager, Construction Schedule

3.10.1, 3.10.3

CONSTRUCTION MANAGER

4

Construction Manager, Definition of

4.1.2

Construction Manager, Documents and Samples at the Site

3.11

Construction Manager, Extent of Authority

3.12.7, 3.12.8, 4.1.3, 4.2.1, 4.2.4, 4.2.5, 4.2.9, 7.1.2, 7.2, 7.3.1, 8.3, 9.3.1, 9.4.1, 9.4.2, 9.4.3, 9.8.2, 9.8.3, 9.8.4, 9.9.1, 12.1, 12.2.1, 14.2.2, 14.2.4

Construction Manager, Limitations of Authority and Responsibility

4.2.5, 4.2.8, 13.4.2

Construction Manager, Submittals

4.2.9

Construction Manager's Additional Services and Expenses

12.2.1

Construction Manager's Administration of the Contract

4.2, 9.4, 9.5

Construction Manager's Approval

2.4, 3.10.1, 3.10.2

Construction Manager's Authority to Reject Work

4.2.8, 12.2.1

Construction Manager's Decisions
7.3.7, 7.3.9, 9.4.1, 9.5.1
Construction Manager's Inspections
4.2.8, 9.8.3, 9.9.2
Construction Manager's On-Site Observations
9.5.1
Construction Manager's Relationship with Architect
1.1.2, 4.2.1, 4.2.7, 4.2.8, 4.2.9, 4.2.13, 4.2.15, 4.2.16,
4.2.20, 9.2.1, 9.4.2, 9.5, 9.6.1, 9.6.3, 9.8.2, 9.8.3,
9.8.4, 9.9.1, 9.10.1, 9.10.2, 9.10.3, 11.1.3, 12.2.4,
13.5.1, 13.5.2, 13.5.4, 14.2.2, 14.2.4
Construction Manager's Relationship with Contractor
3.2.2, 3.2.3, 3.3.1, 3.5, 3.10.1, 3.10.2, 3.10.3, 3.11,
3.12.5, 3.12.6, 3.12.7, 3.12.8, 3.12.9, 3.12.10, 3.13.2,
3.14.2, 3.15.2, 3.16, 3.17, 3.18.1, 4.2.4, 4.2.5, 4.2.6,
4.2.9, 4.2.14, 4.2.17, 4.2.20, 5.2, 6.2.1, 6.2.2, 7.1.2,
7.2, 7.3.5, 7.3.7, 7.3.10, 8.3.1, 9.2, 9.3.1, 9.4.1, 9.4.2,
9.7, 9.8.2, 9.8.3, 9.8.4, 9.9.1, 9.10.1, 9.10.2, 9.10.3,
10.1, 10.3, 11.3.7, 12.1, 13.5.1, 13.5.2, 13.5.3, 13.5.4
Construction Manager's Relationship with Owner
2.2.2, 4.2.1, 10.3.2
Construction Manager's Relationship with Other
Contractors and Owner's Own Forces
4.2.4
Construction Manager's Relationship with
Subcontractors
4.2.8, 5.3, 9.6.3, 9.6.4
Construction Manager's Site Visits
9.5.1
Construction Schedules, Contractor's
3.10, 3.12.1, 3.12.2, 6.1.2, 15.1.5.2
Contingent Assignment of Subcontracts
5.4, 14.2.2.2
Continuing Contract Performance
15.1.3
Contract, Definition of
1.1.2
CONTRACT, TERMINATION OR
SUSPENSION OF THE
5.4.1.1, 11.3.9, **14**
Contract Administration
3.1.3, 4.2, 9.4, 9.5
Contract Award and Execution, Conditions Relating
to
3.7.1, 3.10, 5.2, 6.1, 11.1.3, 11.3.6, 11.4.1
Contract Documents, Copies Furnished and Use of
1.5.2, 2.2.5, 5.3
Contract Documents, Definition of
1.1.1
Contract Performance During Arbitration
15.1.3
Contract Sum
3.7.4, 3.7.5, 3.8, 3.10.2, 5.2.3, 7.2, 7.3, 7.4, **9.1**, 9.2,
9.5.1.4, 9.6.7, 9.7, 10.3.2, 11.3.1.1, 12.3, 14.2.4,
14.3.2, 15.1.4, 15.2.5

Contract Time
3.7.4, 3.7.5, 4, 3.10.2, 5.2.3, 7.2.3, 7.3.1, 7.3.5,
7.3.10, 7.4, 8.1.1, 8.2.1, 8.2.3, 8.3.1, 9.5.1, 9.7,
10.3.2, 12.1.1, 14.3.2, 15.1.5.1, 15.2.5
Contract Time, Definition of
8.1.1
CONTRACTOR
3
Contractor, Definition of
3.1.1
Contractor's Construction Schedules
3.10, 3.12.1, 3.12.2, 6.1.3, 15.1.5.2
Contractor's Employees
3.3.2, 3.4.3, 3.8.1, 3.9, 3.18.2, 4.2.3, 4.2.6, 10.2, 10.3,
11.1.1, 11.3.7, 14.1, 14.2.1.1
Contractor's Liability Insurance
11.1
Contractor's Relationship with Other Contractors and
Owner's Own Forces
3.12.5, 3.14.2, 4.2.6, 6, 11.3, 12.1.2, 12.2.4
Contractor's Relationship with Subcontractors
1.2.2, 3.3.2, 3.18, 5, 9.6.2, 9.6.7, 9.10.2, 11.3.1.2,
11.3.7, 11.3.8, 14.2.1.2
Contractor's Relationship with the Architect
1.1.2, 1.5, 3.2.2, 3.2.3, 3.2.4, 3.4.2, 3.5, 3.7.4, 3.10.1,
3.11, 3.12, 3.16, 3.18, 5.2, 6.2.2, 7, 8.3.1, 9.2, 9.3,
9.4, 9.5, 9.7, 9.8, 9.9, 10.2.6, 10.3, 11.3.7, 12, 13.5,
15.1.2, 15.2.1
Contractor's Relationship with the Construction
Manager
1.1.2, 3.2.2, 3.2.3, 3.3.1, 3.5, 3.10.1, 3.10.2, 3.10.3,
3.11, 3.12.5, 3.12.7, 3.12.9, 3.12.10, 3.13.2, 3.14.2,
3.15.1, 3.16, 3.17, 3.18.1, 4.2.4, 4.2.5, 5.2, 6.2.1,
6.2.2, 7.1.2, 7.3.5, 7.3.7, 7.3.10, 8.3.1, 9.2, 9.3.1,
9.4.1, 9.4.2, 9.8.2, 9.9.1, 9.10.1, 9.10.2, 9.10.3, 10.1,
10.2.6, 10.3, 11.3.7, 12.1, 13.5.1, 13.5.2, 13.5.3,
13.5.4
Contractor's Representations
3.2.1, 3.2.2, 3.5, 3.12.6, 6.2.2, 8.2.1, 9.3.3, 9.8.2
Contractor's Responsibility for Those Performing the
Work
3.3.2, 3.18, 5.3, 6.1.3, 6.2, 9.5.1, 10.2.8
Contractor's Review of Contract Documents
3.2
Contractor's Right to Stop the Work
9.7
Contractor's Right to Terminate the Contract
14.1
Contractor's Submittals
3.10.2, 3.11, 3.12, 4.2.9, 9.2, 9.3, 9.8.2, 9.9.1, 9.10.2,
9.10.3, 11.1.3, 11.4.2
Contractor's Superintendent
3.9, 10.2.6
Contractor's Supervision and Construction
Procedures
1.2.2, 3.3, 3.4, 4.2.5, 4.2.7, 6.1, 6.2.4, 7.1.3, 7.3.5,
7.3.7, 8.2, 10, 12, 14, 15.1.3

Contractual Liability Insurance
11.1.1.8, 11.2, 11.3.1.5
Coordination and Correlation
1.2, 3.2, 3.3.1, 3.10, 3.12.6, 6.1.2, 6.2.1
Copies Furnished of Drawings and Specifications
1.5, 2.2.5, 3.11
Copyrights
1.5, 3.17
Correction of Work
2.3, 2.4, 9.4.1, 9.4.2, 9.8.2, 9.8.3, 9.9.1, 12.1.2, **12.2**
Correlation and Intent of the Contract Documents
1.2
Costs
2.4, 3.2.4, 3.7.3, 3.8.2, 3.15.2, 5.4.2, 6.1.1, 6.2.3,
7.3.3.3, 7.3.6, 7.3.7, 7.3.8, 7.3.9, 11.3.1.2, 11.3.1.3,
11.3.4, 11.3.9, 12.1, 12.2.1, 13.5, 14
Cutting and Patching
3.14, 6.2.5
Damage to Construction of Owner or Other
Contractors
3.14.2, 6.2.4, 9.5.1.5, 10.2.1.2, 10.2.5, 10.4, 11.1.1,
11.3, 12.2.4
Damage to the Work
3.14.2, 9.9.1, 10.2.1.2, 10.2.5, 10.4, 11.3.1, 12.2.4
Damages, Claims for
3.2.4, 3.18, 6.1.1, 8.3.2, 10.3.3, 11.1.1, 11.3.5, 11.3.7,
14.2.4, 15.1.6
Damages for Delay
6.1.1, 8.3.3, 9.5.1.6, 9.7, 10.3.2, 15.1.5
Date of Commencement of the Work, Definition of
8.1.2
Date of Substantial Completion, Definition of
8.1.3
Day, Definition of
8.1.4
Decisions of the Architect
3.7.4, 4.2.7, 4.2.8, 4.2.10, 4.2.11, 4.2.13, 4.2.15,
4.2.16, 4.2.17, 4.2.18, 4.2.19, 4.2.20, 7.3.9, 8.1.3,
8.3.1, 9.2, 9.4, 9.5, 9.8.3, 9.8.4, 9.9.1, 10.1.2, 13.5.2,
14.2.2, 14.2.4, 15.1, 15.2
Decisions of the Construction Manager
7.3.7, 7.3.8, 7.3.9, 15.1, 15.2
Decisions to Withhold Certification
9.4.1, **9.5**, 9.7, 14.1.1.3
Defective or Nonconforming Work, Acceptance,
Rejection and Correction of
2.3, 2.4, 3.5, 4.2.8, 6.2.5, 9.5.1, 9.6.6, 9.8.2, 9.9.3,
9.10.4, 12.2.1, 12.2.2
Definitions
1.1, 2.1.1, 3.1.1, 3.12.1, 3.12.2, 3.12.3, 4.1.1, 4.1.2,
7.2, 7.3.1, 8.1, 9.1, 9.8.1, 15.1.1
Delays and Extensions of Time
3.2, 3.7.4, 5.2.3, 7.2, 7.3.1, 7.4, **8.3**, 9.5.1, 9.7, 10.3.2,
10.4, 14.3.2, 15.1.5, 15.2.5
Disputes
7.3.8, 7.3.9, 9.3, 15.1, 15.2

DISPUTES, CLAIMS AND
3.2.4, 6.1.1, 6.3, 7.3.9, 9.3.3, **15**, 15.4
Documents and Samples at the Site
3.11
Drawings, Definition of
1.1.5
Drawings and Specifications, Ownership and Use
1.1.1, **1.5**, 2.2.5, 3.11, 5.3
Duty to Review Contract Documents and Field
Conditions
3.2
Effective Date of Insurance
8.2.2, 11.1.2
Emergencies
10.4, 14.1.1.2, 15.1.4
Employees, Contractor's
3.3.2, 3.4.3, 3.8.1, 3.9, 3.18.1, 3.18.2, 4.2.3, 4.2.6,
10.2, 10.3.3, 11.1.1, 11.3.7, 14.1, 14.2.1.1
Equipment, Labor, Materials and or
1.1.3, 1.1.6, 3.4, 3.5, 3.8.2, 3.8.3, 3.12.2, 3.12.3,
3.13.1, 3.15.1, 4.2.8, 4.2.7, 5.2.1, 6.2.1, 7.3.7, 9.3.2,
9.3.3, 9.5.1.3, 9.10.2, 10.2.1, 10.2.4, 14.2.2
Execution and Progress of the Work
1.1.3, 1.2.1, 1.2.2, 2.2.3, 2.2.5, 3.1, 3.3.1, 3.4.1, 3.5,
3.7.1, 3.10.1, 3.12, 3.14, 4.2, 6.2.2, 7.1.3, 7.3.5, 8.2,
9.5.1, 9.9.1, 10.2, 10.3, 12.2, 14.2, 14.3.1, 15.1.3
Extensions of Time
3.2.4, 3.7.4, 5.2.3, 7.2.3, 7.4, 8.3, 9.5.1, 9.7, 10.3.2,
10.4, 14.3, 15.1.5, 15.2.5
Failure of Payment
9.5.1.3, **9.7**, 13.6, 14.1.1.3, 14.1.3, 14.2.1.2, 15.1.4
Faulty Work (See Defective or Nonconforming
Work)
Final Completion and Final Payment
4.2.1, 4.2.15, 9.8.2, **9.10**, 11.1.2, 11.1.3, 11.3.1,
11.3.5, 12.3, 15.2.1
Financial Arrangements, Owner's
2.2.1
GENERAL PROVISIONS
1
Governing Law
13.1
Guarantees (See Warranty and Warranties)
Hazardous Materials
10.2.4, 10.3
Identification of Contract Documents
1.2.1
Identification of Subcontractors and Suppliers
5.2.1
Indemnification
3.18, 9.10.2, 10.3.3, 10.3.5, 10.3.6, 11.3.1.2, 11.3.7
Information and Services Required of the Owner
2.1.2, **2.2**, 4.2.6, 6.1.2, 6.2.5, 9.6.1, 9.6.4, 9.8, 9.9.1,
9.10.3, 10.3.2, 10.3.3, 11.2, 11.3.4, 13.5.1, 13.5.2,
14.1.1.4, 14.1.3, 15.1.2
Initial Decision
15.2

Initial Decision Maker, Definition of

1.1.8

Initial Decision Maker, Extent of Authority

14.2.2, 14.2.4, 15.1.3, 15.2.2, 15.2.3, 15.2.4, 15.2.5

Injury or Damage to Person or Property

3.18.1, 10.2.1, 10.2.2, **10.2.8**, 10.3, 10.3.3, 10.4,

11.1.1

Inspections

3.1.3, 3.7.1, 4.2.2, 9.8.2, 9.9.2, 9.10.1, 13.5

Instructions to Bidders

1.1.1

Instructions to the Contractor

3.1.4, 3.3.3, 3.7.1, 4.2.4, 5.2.1, 7, 8.2.2, 12.1, 13.5.2

Instruments of Service, Definition of

1.1.7, 1.5, 1.6

Insurance

6.1.1, 7.3.7, 8.2.2, 9.3.2, 9.8.4, 9.9.1, 9.10.2, 10.2.5, 11

Insurance, Boiler and Machinery

11.3.2

Insurance, Contractor's Liability

11.1

Insurance, Effective Date of

8.2.2, 11.1.2

Insurance, Loss of Use

11.3.3

Insurance, Owner's Liability

11.2

Insurance, Property

10.2.5, **11.3**

Insurance, Stored Materials

9.3.2, 11.3.1

INSURANCE AND BONDS

11

Insurance Companies, Consent to Partial Occupancy

9.9.1, 11.3.1.5

Insurance Companies, Settlement with

11.3.10

Intent of the Contract Documents

1.2, 4.2.18, 4.2.19, 7.4

Interest

9.7, **13.6**

Interpretation

1.4, 4.2.8, 4.2.17, 4.2.18

Interpretations, Written

4.2.17, 4.2.18, 4.2.20

Joinder and Consolidation of Claims Required

15.4.4

Judgment on Final Award

15.4.2

Labor and Materials, Equipment

1.1.3, 1.1.6, 3.4, 3.8.2, 3.8.3, 3.12.2, 3.12.3, 3.12.6,

3.12.10, 3.13.1, 3.15.1, 5.2.1, 6.2.1, 7.3.7, 9.3.2,

9.3.3, 9.5.1.3, 9.6, 9.10.2, 10.2.1.2, 11.3.1, 14.2.1,

14.2.2

Labor Disputes

8.3.1

Laws and Regulations

3.2.3, 3.2.4, 3.7, 3.13.1, 10.2.2, 10.2.3, 13.5.1, 14.2.1

Liens

2.1.2, 9.3.3, 9.10.2, 9.10.4, 15.2.8

Limitation on Consolidation or Joinder

15.4.4

Limitations, Statutes of

15.4.1

Limitations of Authority

3.12.4, 4.1.3, 4.2.16

Limitations of Liability

9.6.7, 11.1.1, 12.2

Limitations of Time

3.10.1, 4.2.17, 4.2.20, 8.2.1, 9.3.3, 9.6.1, 9.8.4,

9.10.2, 10.2, 11.1.3, 12.1.1, 12.2.2.2, 12.2.5, 13.7,

14.1.1, 15.2.6.1

Loss of Use Insurance

11.3.3

Material Suppliers

1.5.1, 1.5.2, 3.12, 4.2.6, 4.2.8, 9.3.1, 9.3.1.2, 9.3.3,

9.5.3, 9.6.4, 9.6.5, 9.6.7, 9.10.5, 11.3.1

Materials, Hazardous

10.2.4, **10.3**

Materials, Labor, Equipment and

1.1.3, 1.1.6, 1.5.1, 1.5.2, 3.4, 3.5, 3.8.2, 3.8.3, 3.12.2,

3.12.3, 3.12.6, 3.12.10, 3.13.1, 5.2.1, 6.2.1, 9.3.1,

9.3.2, 9.3.3, 9.5.1, 9.5.3, 9.6.4, 9.6.5, 9.6.7, 9.10.2,

9.10.5, 10.2.1, 10.2.4, 10.3

Means, Methods, Techniques, Sequences and

Procedures of Construction

3.3.1, 3.12.10, 4.2.5, 4.2.11

Mechanic's Lien

2.1.2, 15.2.8

Mediation

8.3.1, 10.3.5, 15.2.1, 15.2.5, 15.2.6, **15.3**, 15.4.1

Minor Changes in the Work

1.1.1, 3.12.8, 4.2.13, 7.1, **7.4**

MISCELLANEOUS PROVISIONS

13

Modifications, Definition of

1.1.1

Modifications to the Contract

1.1.1, 1.1.2, 3.11, 4.1.3, 4.2.14, 5.2.3, 7, 11.3.1

Mutual Responsibility

6.2

Nonconforming Work, Acceptance of

9.4.3, 9.8.3, **12.3**

Nonconforming Work, Rejection and Correction of

2.3, 2.4, 3.2.3, 3.7.3, 9.4.3.3, 9.8.2, 9.8.3, 9.9.1,

11.1.1, 12.2.2.1, 12.2.3, 12.2.4, 12.2.5

Notice

1.5, 2.1.2, 2.2.1, 2.4, 3.2.4, 3.3.1, 3.7.1, 3.7.2, 3.7.5,

3.9.2, 3.12.9, 5.2.1, 6.3, 9.4.1, 9.7, 9.10.1, 9.10.2,

10.2.2, 10.2.6, 10.2.8, 10.3.2, 11.3.6, 12.2.2.1, 13.3,

13.5.1, 13.5.2, 14.1.2, 14.2.2, 14.4.2, 15.1.2, 15.1.4,

15.1.5.1, 15.2, 15.4.1

Notice of Claims

3.7.2, 10.2.8, **15.1.2**, 15.4.1

Notice of Testing and Inspections

13.5.1, 13.5.2

Notices, Permits, Fees and

3.7, 7.3.7, 10.2.2

Observations, On-Site

3.2.1, 9.5.1, 12.1.1

Occupancy

2.2.2, 9.6.6, 9.9, 11.3.1.5

On-Site Inspections

4.2.2, 9.10.1, 9.4.4, 9.5.1

Orders, Written

4.2.7, 4.2.18, 4.2.20

Other Contracts and Contractors

1.1.4, 3.14.2, 4.2.9, 6, 11.3.7, 12.1.2

OWNER

2

Owner, Definition of

2.1.1

Owner, Information and Services Required of the

2.1.2, **2.2**, 4.2, 6.1.2, 6.1.3, 6.2.5, 9.3.2, 9.6.1, 9.6.4,

9.9.2, 9.10.2, 10.3.3, 11.2, 11.3, 13.5.1, 13.5.2,

14.1.1, 14.1.3, 15.1.3

Owner's Authority

1.5, 2.1.1, 2.3, 2.4, 3.4.2, 3.12.10, 3.14.2, 4.1.2, 4.1.3,

4.2.8, 4.2.9, 5.2.1, 5.2.4, 5.4.1, 6.1, 6.3, 7.2, 7.3.1,

8.2.2, 9.3.1, 9.3.2, 9.5.1, 9.6.4, 9.9.1, 9.10.2, 10.3.2,

11.3.3, 11.3.10, 12.2.2.1, 12.3, 13.5.2, 14.2, 14.3.1,

14.4, 15.2.7

Owner's Financial Capability

2.2.1, 13.2.2, 14.1.1

Owner's Liability Insurance

11.2

Owner's Relationship with Subcontractors

1.1.2, 5.2.1, 5.3, 5.4.1, 9.6.4, 9.10.2, 14.2.2

Owner's Right to Carry Out the Work

2.4, 12.2.4, 14.2.2

Owner's Right to Clean Up

6.3

Owner's Right to Perform Construction with Own Forces and to Award Other Contracts

6.1

Owner's Right to Stop the Work

2.3

Owner's Right to Suspend the Work

14.3

Owner's Right to Terminate the Contract

14.2

Ownership and Use of Drawings, Specifications and Other Instruments of Service

1.1.1, 1.1.5, **1.5**, 1.6, 3.11, 3.12.10, 3.17, 4.2.14,

4.2.18, 4.2.20

Partial Occupancy or Use

9.9, 11.3.1.5

Patching, Cutting and

3.14, 6.2.5

Patents and Copyrights, Royalties

3.17

Payment, Applications for

4.2.1, 4.2.7, 4.2.15, 7.3.9, 9.2, **9.3**, 9.4, 9.5, 9.7,

9.10.1, 9.10.3, 9.10.5, 11.1.3

Payment, Certificates for

4.2.15, 7.3.9, 9.3, **9.4**, 9.5, 9.6.1, 9.6.6, 9.7, 9.10.1,

9.10.3, 14.1.1.3, 15.1.3

Payment, Failure of

9.4.1, 9.5, **9.7**, 14.1.1.3

Payment, Final

4.2.1, 9.8.2, **9.10**, 11.1.2, 11.3.1, 11.3.5, 12.3, 15.2.1

Payment Bond, Performance Bond and

5.4.1, 7.3.7, 9.6.7, 9.10.2, 9.10.3, 11, **11.4**

Payments, Progress

9.3.1, 9.4.2, **9.6**

PAYMENTS AND COMPLETION

9, 14

Payments to Subcontractors

5.4.2, 9.3, 9.5.1.3, 9.5.3, 9.6.2, 9.6.3, 9.6.4, 9.6.7,

9.10.5, 14.2.1.2

PCB

10.3.1

Performance Bond and Payment Bond

5.4.1, 7.3.7, 9.6.7, 9.10.2, 9.10.3, 11, **11.4**

Permits, Fees, Notices and Compliance with Laws

2.2.2, **3.7**, 7.3.7.4, 10.2.2

PERSONS AND PROPERTY, PROTECTION OF

10

Polychlorinated Biphenyl

10.3.1

Product Data, Definition of

3.12.2

Product Data and Samples, Shop Drawings

3.11, **3.12**, 4.2.9, 4.2.10, 4.2.14

Progress and Completion

8.2, 9.3.1, 9.4.2, 9.6, 9.8, 9.10, 14.2.4, 15.1.6

Progress Payments

9.3.1, 9.4.2, **9.6**

Project, Definition of

1.1.4

Project Representatives

4.2.16

Property Insurance

10.2.5, **11.3**

Project Schedule

3.10.1, 3.10.3, 3.10.4, 4.2.2, 4.2.3, 4.2.4

PROTECTION OF PERSONS AND PROPERTY

10

Regulations and Laws

1.5, 3.2.3, 3.6, 3.7, 3.12.10, 3.13, 4.1.1, 9.6.4, 9.9.1,

10.2.2, 11.1, 11.4, 13.1, 13.4, 13.5.1, 13.5.2, 13.6,

14.1.1, 14.2.1, 15.2.8, 15.4

Rejection of Work

3.5, 4.2.8, 12.2.1

Releases of and Waivers and of Liens
9.10.2
Representations
1.3, 2.2.1, 3.5, 3.12, 6.2.2, 8.2.1, 9.3.3, 9.4.3, 9.5.1,
9.8.2, 9.10.1
Representatives
2.1.1, 3.1.1, 3.9, 4.1.1, 4.2.1, 4.2.2, 4.2.10, 5.1.1,
5.1.2, 13.2.1
Requests for Information
4.2.20
Resolution of Claims and Disputes
15
Responsibility for Those Performing the Work
3.3.2, 3.7.3, 3.12.8, 3.18, 4.2.2, 4.2.5, 4.2.8, 5.3,
6.1.2, 6.2, 6.3, 9.5.1, 9.8.2, 10
Retainage
9.3.1, 9.6.2, 9.8.5, 9.9.1, 9.10.2, 9.10.3
**Review of Contract Documents and Field
Conditions by Contractor**
1.2.2, **3.2**, 3.7.3, 3.12.7
Review of Contractor's Submittals by Owner,
Construction Manager and Architect
3.10.1, 3.10.2, 3.11, 3.12, 4.2, 5.2, 5.2, 9.2, 9.8.2
Review of Shop Drawings, Product Data and
Samples by Contractor
3.12.5
Rights and Remedies
1.1.2, 2.3, 2.4, 3.7.4, 3.15.2, 4.2.8, 5.3, 5.4, 6.1, 6.3,
7.3.1, 8.3, 9.5.1, 9.7, 10.2.5, 10.3, 12.2.2,
12.2.4, **13.4**, 14, 15.4
Royalties, Patents and Copyrights
3.17
Rules and Notices for Arbitration
15.4
Safety of Persons and Property
10.2, 10.3, 10.4
Safety Precautions and Programs
3.3.1, 3.12, 4.2.5, 5.3, **10.1**, 10.2, 10.3, 10.4
Samples, Definition of
3.12.3
Samples, Shop Drawings, Product Data and
3.11, **3.12**, 4.2.9, 4.2.10
Samples at the Site, Documents and
3.11
Schedule of Values
9.2, 9.3.1
Schedules, Construction
3.10, 3.12.1, 3.12.2, 6.1.2, 15.1.5.2
Separate Contracts and Contractors
1.1.4, 3.12.5, 3.14.2, 4.2.6, 4.2.11, 6, 8.3.1, 12.1.2
Shop Drawings, Definition of
3.12.1
Shop Drawings, Product Data and Samples
3.11, **3.12**, 4.2.9, 4.2.10, 4.2.14
Site, Use of
3.13, 6.1.1, 6.2.1

Site Inspections
3.2.2, 3.3.3, 3.7.1, 3.7.4, 4.2.2, 4.2.3, 4.2.15, 9.4.3.3,
9.8.3, 9.9.2, 9.10.1, 13.5
Site Visits, Architect's
3.7.4, 4.2.2, 4.2.15, 9.8.3, 9.9.2, 9.10.1, 13.5
Special Inspections and Testing
4.2.8, 12.2.1, 13.5
Specifications, Definition of
1.1.6
Specifications
1.1.1, **1.1.6**, 1.2.2, 1.5, 3.11, 3.12.10, 3.17, 4.2.14
Staffing Plan
4.2.3
Statute of Limitations
12.2.5, 13.7, 15.4.1.1
Stopping the Work
2.3, 9.7, 10.3, 14.1
Stored Materials
6.2.1, 9.3.2, 10.2.1.2, 10.2.4
Subcontractor, Definition of
5.1.1
SUBCONTRACTORS
5
Subcontractors, Work by
1.2.2, 3.3.2, 3.12.1, 4.2.5, 5.2.3, 5.3, 5.4, 9.3.1.2,
9.6.7
Subcontractual Relations
5.3, 5.4, 9.3.1.2, 9.6.2, 9.6.3, 9.10, 10.2.1, 14.1, 14.2
Submittals
3.2.3, 3.10, 3.11, 3.12, 4.2.9, 4.2.10, 4.2.11, 5.2.1,
5.2.3, 7.3.7, 9.2, 9.3, 9.8, 9.9.1, 9.10.2, 9.10.3, 11.1.3
Submittal Schedule
3.10.2, 3.12.5, 4.2.9, 4.2.10
Subrogation, Waivers of
6.1.1, **11.3.7**
Substantial Completion
8.1.1, 8.1.3, 8.2.3, 9.4.3.3, **9.8**, 9.9.1, 9.10.3, 12.2.1,
12.2.2, 13.7
Substantial Completion, Definition of
9.8.1
Substitution of Subcontractors
5.2.3, 5.2.4
Substitution of Architect
4.1.4
Substitution of Construction Manager
4.1.4
Substitutions of Materials
3.4.2, 3.5, 7.3.8
Sub-subcontractor, Definition of
5.1.2
Subsurface Conditions
3.7.4
Successors and Assigns
13.2
Superintendent
3.9, 10.2.6

Supervision and Construction Procedures

1.2.2, **3.3**, 3.4, 3.12.10, 4.2.2, 4.2.3, 4.2.5, 4.2.8, 4.2.9, 4.2.10, 4.2.11, 6.1.3, 6.2.4, 7.1.3, 7.3.7, 8.2, 8.3.1, 9.4.3.3, 10, 12, 14, 15.1.3

Surety

5.4.1.2, 9.8.5, 9.10.2, 9.10.3, 14.2.2, 15.2.7

Surety, Consent of

9.10.2, 9.10.3

Surveys

1.1.7, 2.2.3

Suspension by the Owner for Convenience

14.3

Suspension of the Work

5.4.2, 14.3

Suspension or Termination of the Contract

5.4.1.1, 14

Taxes

3.6, 3.8.2.1, 7.3.7.4

Termination by the Contractor

14.1, 15.1.6

Termination by the Owner for Cause

5.4.1.1, **14.2**, 15.1.6

Termination by the Owner for Convenience

14.4

Termination of the Contractor

14.2.2

TERMINATION OR SUSPENSION OF THE CONTRACT

14

Tests and Inspections

3.1.4, 3.3.3, 4.2.2, 4.2.6, 4.2.8, 9.4.3.3, 9.8.3, 9.9.2, 9.10.1, 10.3.2, 12.2.1, **13.5**

TIME

8

Time, Delays and Extensions of

3.2.4, 3.7.4, 5.2.3, 7.2, 7.3.1, 7.4, **8.3**, 9.5.1, 10.3.2, 14.3.2, 15.1.5, 15.2.5

Time Limits

2.1.2, 2.2, 2.4, 3.2.2, 3.10, 3.11, 3.12.5, 3.15.1, 4.2.1, 5.2, 5.3, 5.4, 6.2.4, 7.3, 7.4, 8.2, 9.2, 9.3.1, 9.3.3, 9.4.1, 9.4.2, 9.5, 9.6, 9.7, 9.8, 9.9, 9.10, 11.1.3, 11.4, 12.2, 13.5, 13.7, 14, 15

Time Limits on Claims

3.7.4, 10.2.8, **13.7**, 15.1.2

Title to Work

9.3.2, 9.3.3

Transmission of Data in Digital Form

1.6

UNCOVERING AND CORRECTION OF WORK

12

Uncovering of Work

12.1

Unforeseen Conditions, Concealed or Unknown

3.7.4, 8.3.1, 10.3

Unit Prices

7.3.3.2, 7.3.4

Use of Documents

1.1.1, 1.5, 2.2.5, 3.12.6, 5.3

Use of Site

3.13, 6.1.1, 6.2.1

Values, Schedule of

9.2, 9.3.1

Waiver of Claims by the Architect

13.4.2

Waiver of Claims by the Construction Manager

13.4.2

Waiver of Claims by the Contractor

9.10.5, 13.4.2, 15.1.6

Waiver of Claims by the Owner

9.9.3, 9.10.3, 9.10.4, 12.2.2.1, 13.4.2, 14.2.4, 15.1.6

Waiver of Consequential Damages

14.2.4, 15.1.6

Waiver of Liens

9.10.2, 9.10.4

Waivers of Subrogation

6.1.1, **11.3.7**

Warranty

3.5, 4.2.15, 9.3.3, 9.8.4, 9.9.1, 9.10.4, 12.2.2

Weather Delays

15.1.5.2

Work, Definition of

1.1.3

Written Consent

1.5.2, 3.4.2, 3.7.4, 3.12.8, 3.14.2, 4.1.3, 9.3.2, 9.8.5, 9.9.1, 9.10.2, 9.10.3, 10.3.2, 11.4.1, 13.2, 13.4.2, 15.4.4.2

Written Interpretations

4.2.17, 4.2.18

Written Notice

2.3, 2.4, 3.3.1, 3.9, 3.12.9, 3.12.10, 5.2.1, 5.3, 5.4.1.1, 8.2.2, 9.4, 9.5.1, 9.7, 9.10, 10.2.2, 10.3, 11.1.3, 12.2.2, 12.2.4, **13.3**, 13.5.2, 14, 15.4.1

Written Orders

1.1.1, 2.3, 3.9, 7, 8.2.2, 12.1, 12.2, 13.5.2, 14.3.1, 15.1.2

ARTICLE 1 GENERAL PROVISIONS

§ 1.1 Basic Definitions

§ 1.1.1 The Contract Documents. The Contract Documents are enumerated in the Agreement between the Owner and Contractor (hereinafter the “Agreement” or the “Contract”), and consist of the Agreement, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, Addenda issued prior to execution of the Contract, other documents listed in the Agreement and Modifications issued after execution of the Contract. A Modification is (1) a written amendment to the Contract signed by both parties, (2) a Change Order, (3) a Construction Change Directive or (4) a written order for a minor change in the Work issued by the Architect. Unless specifically ~~enumerated-excluded~~ in the Agreement, the Contract Documents ~~do not~~ include the advertisement or invitation to bid, Instructions to Bidders, sample forms, other information furnished by the Owner in anticipation of receiving bids or proposals including the Owner’s Request For Proposals, including the Project Manual, (collectively the “RFP”), and the Contractor’s bid or proposal (to the extent it does not conflict with the Owner’s RFP, or portions of addenda relating to bidding requirements).

§ 1.1.2 The Contract. The Contract Documents form the Contract for Construction. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations or agreements, either written or oral. The Contract may be amended or modified only by a Modification. The Contract Documents shall not be construed to create a contractual relationship of any kind (1) between the Contractor and the Architect or the Architect’s consultants, (2) between the Owner and the Construction Manager or the Construction Manager’s consultants, (3) between the Owner and the Architect or the Architect’s consultants, (4) between the Contractor and the Construction Manager or the Construction Manager’s consultants, (5) between the Owner and a Subcontractor or Sub-subcontractor (6) between the Construction Manager and the Architect, or (7) between any persons or entities other than the Owner and Contractor. The Construction Manager and Architect shall, however, be entitled to performance and enforcement of obligations under the Contract Documents intended to facilitate Contractor’s performance of their-its duties.

§ 1.1.3 The Work. ~~The term “Work” means the construction and services required by the Contract Documents, whether completed or partially completed, and includes all other labor, materials, equipment and services provided or to be provided by the Contractor to fulfill the Contractor’s obligations. The Work may constitute the whole or a part of the Project. The term “Work” consists of all goods and services, such as labor, transportation, materials, tools, and equipment (i) to be incorporated into the Project (or the Contractor’s portion of the Project if the Contractor is not responsible for the entire Project), (ii) required of the Contractor under the Contract Documents, or (iii) necessary or appropriate to fully construct, operate and maintain the Project (or the Contractor’s portion of the Project if the Contractor is not responsible for the entire Project). The Work shall be performed in accordance with the Contract Documents. The Work may constitute the whole or a part of the Project. The term “Work” shall also include labor, materials, equipment and services provided or to be provided by Subcontractors, sub-subcontractors, material suppliers or any other entity for whom the Contractor is responsible under or pursuant to the Contract Documents.~~

§ 1.1.4 The Project. The Project is the total construction of which the Work performed under the Contract Documents may be the whole or a part and which may include construction by other Multiple Prime Contractors and by the Architect or the Owner’s own forces, including persons or entities under separate contracts not administered by the Construction Manager.

§ 1.1.5 The Drawings. The Drawings are the graphic and pictorial portions of the Contract Documents showing the design, location and dimensions of the Work, generally including plans, elevations, sections, details, schedules and diagrams.

§ 1.1.6 The Specifications. The Specifications are that portion of the Contract Documents consisting of the written requirements for materials, equipment, systems, standards and workmanship for the Work, and performance of related services.

§ 1.1.7 Instruments of Service. Instruments of Service are representations, in any medium of expression now known or later developed, of the tangible and intangible creative work performed by the Architect and the Architect’s consultants under their respective professional services agreements. Instruments of Service may include, without limitation, studies, surveys, models, sketches, drawings, specifications, and other similar materials.

§ 1.1.8 Initial Decision Maker. The Initial Decision Maker ~~is the person identified shall be the Architect, unless otherwise provided~~ in the Agreement to render initial decisions on Claims in accordance with ~~Section Article 15.2~~ and certify termination of the Agreement under ~~Section Article 14.2.2~~.

§ 1.1.9 Products. The term "Product(s)" as used in the Contract Documents refers to the materials, systems and equipment provided by the Contractor for use in the Work of the Project.

§ 1.1.10 Warranty/Guaranty. The terms "Warranty" and "Guarantee" as used in the Contract Documents shall have the same meaning and shall be defined as "legally enforceable assurance of satisfactory performance or quality of a product or Work."

§ 1.1.11 Quantity. Where materials, systems, goods and equipment items are referred to in the singular, such reference shall not serve to limit the quantity required. The Contractor shall furnish quantities as required by the Contract Documents to complete the Work.

§ 1.1.13 Project Manual. The Project Manual is a volume of documents and information assembled for the Work which may include the bidding requirements, sample forms, Conditions of the Contract, Specifications, Drawings, the Contract and other information furnished by the Owner.

§ 1.1.14 Applicable Laws. Applicable Laws means all applicable federal, state and local codes, statutes, ordinances, laws (including, but not limited to, the Americans with Disabilities Act ["ADA"], the Revised School Code, MCL 380.1 et seq., the School Building Construction Act, MCL 388.851 et seq., the Stille-Derozett-Hale Single State Construction Code Act, MCL 125.1501 et seq., the Michigan Building Code, federal, state and local environmental laws and regulations, and the, rules and regulations, policies, guidelines and consent, administrative or other lawful orders of all public authorities having jurisdiction over the Project, the Work site, the Work or the prosecution of the Work.

§ 1.1.15 Construction Schedule. The Construction Schedule is the Critical Path Method ("CPM") schedule for construction of the Work submitted as part of the Contractor's Contract Sum or Guaranteed Maximum Price Proposal, prepared by the Contractor and approved by the Owner, in writing, in accordance with Section 3.10. The Construction Schedule can be modified only by Change Order. Following any such modification, the term "Construction Schedule" shall mean the most recent Owner-approved version. The initial agreed upon Construction Schedule is attached to the Contract as an Exhibit and is referred to as the Project Schedule.

§ 1.1.16 Milestone Dates. The Milestone Dates are those dates included in the Master Design and Construction Schedule and Construction Schedule that are critical to ensuring the timely and orderly completion of the Work in accordance with the requirements of the Contract Documents.

§ 1.1.17 Construction Team. The Construction Team includes the Contractor, Subcontractors, sub-subcontractor at any tier and suppliers and (i) all other persons in privity of contract with any of them in connection with the Work (except the Owner), (ii) anyone else providing labor, materials, supplies, equipment or services as part of or in connection with the Work (except those, if any, hired directly or indirectly by the Owner), and (iii) all of their officers, employees, agents, and independent contractors.

§ 1.1.18 Construction Time. The Construction Time is the number of calendar days described in the Construction Schedule in which (or, alternatively, the date set forth in the Construction Schedule by which) Substantial Completion shall be achieved, subject to any extensions granted in executed Change Orders or otherwise specifically permitted by the Contract Documents. Any references to Contract time shall be interpreted to mean Construction Time.

§ 1.1.19 Extraordinary Measures. Extraordinary Measures are corrective measures necessary to expedite the progress of the Work, including (i) working additional shifts or overtime, (ii) supplying additional manpower, equipment, and facilities, (iii) expediting the delivery of materials, and (iv) other similar measures. Subject to the Contractor's rights under Section 7.5, the Owner shall have the right to order the Contractor to take Extraordinary Measures when it determines that the performance of the Work, as of a Milestone Date, has not progressed to or reached the level of completion required by the Contract Documents at Contractor's sole cost and expense.

§ 1.1.20 Master Design And Construction Schedule. The Master Design and Construction Schedule is the preliminary schedule for the Work to be developed by the Owner or Contractor during the bidding and negotiation process and which shall, at a minimum, provide for major elements such as preparation of the design, phasing of construction,

the time of commencement and completion required for each anticipated Bid Package.

§ 1.1.21 Owner Delay. An Owner Delay means an actual delay to Contractor's completion of the Work to the extent caused by one or more of the following: (i) Modifications (excluding minor changes in the Work and Architect interpretations), (ii) the Owner's failure (or that of any other person for whom the Owner is responsible to the Contractor including, the Architect or a separate contractor hired by the Owner) to provide any data or information requested by the Contractor in writing that is reasonably necessary for Contractor to carry out its duties and is the Owner's obligation to provide (so long as the Owner and any other responsible person are given adequate time to respond); or (iii) unreasonable interference by the Owner or persons for whom it is responsible to the Contractor, including, the Architect or a separate contractor hired by the Owner, with the Contractor's performance of the Work, which is not cured within five (5) business days of written notice to the Owner.

§ 1.1.22 Owner's Representative. Owner's Representative means a consultant engaged by the Owner to assist the Owner with the management and/or coordination of the Project as set forth in the Agreement. Unless otherwise provided in the Agreement, Contract Documents or specifically authorized by the Owner, the Owner's Representative is not authorized to commit the Owner in matters regarding changes in the Work, Construction Schedule, or grant approvals on behalf of the Owner.

§ 1.1.23 Punchlist. Punchlist means a list of uncompleted or unacceptable items of Work which do not interfere with the use or occupancy of any part of the Work for its intended purpose and which, unless delayed by a need to order materials that could not reasonably have been anticipated by the Contractor, collectively are capable of being completed within sixty (60) days.

§ 1.1.24 Value Engineering. Value Engineering means the detailed analysis of systems, equipment, materials, services, facilities, and supplies required by the Contract Documents for the purpose of achieving the desired and essential functions of the Owner's program at the lowest cost consistent with required and necessary performance, reliability, quality and safety.

§ 1.1.25 Hazardous Materials. Hazardous Materials means any solid, liquid or gaseous waste, regulated substance or material in any Applicable Law, and shall include, without limitation, any petroleum or petroleum products or by-products, Urea Formaldehyde, flammable explosives, radioactive materials, asbestos in any form, lead paint, polychlorinated biphenyls and any other substance or material which constitutes a threat to health, safety, property or the environment or which has been or is in the future determined by any governmental entity to be prohibited, limited or regulated by any applicable environmental law or regulation. It is the intent of the parties, for purposes of this Agreement, that the term Hazardous Material is broadly construed.

§ 1.1.26 Word Clarifications.

§ 1.1.26.1 The words "consent," "approved," "satisfactory," "proper," "as directed," any derivatives of them, or similar terms, mean written approval by the Owner, and may include approval of the Architect if the Owner so directs. Except where a different standard is specifically established, the Owner has the right to grant or withhold such approval in its sole discretion.

§ 1.1.26.2 The word "provide" and any derivatives thereof, and similar terms, mean to properly fabricate, complete, transport, deliver, install, erect, construct, test and furnish all labor, materials, equipment, apparatus, appurtenances, and all items and expenses necessary to properly complete in place, ready for operation or use under the terms of the Contract Documents.

§ 1.1.26.3 The terms "known," "knowledge," "recognize," "believe," and "discover," and any derivatives thereof and similar terms, when used in reference to the Contractor, shall mean that which the Contractor knows or should reasonably know, recognizes or should reasonably recognize, and discovers or should reasonably discover in exercising the care, skill, and diligence required of the Contractor by the Agreement. The expression "reasonably inferable" and similar terms mean reasonably inferable by a Contractor familiar with the Work and exercising the care, skill and diligence required of the Contractor by the Agreement.

§ 1.1.26.4 The word "including" shall not be a word of limitation, but instead shall be construed as introducing one or more nonexclusive examples.

§ 1.1.26.5 Words or abbreviations that are not defined but have well-known technical, trade or construction industry meanings, shall have those meanings ascribed to them. The singular shall include the plural and vice versa. Pronouns are interchangeable. The word "person" includes human beings and recognized legal entities. Unless the context clearly requires otherwise, reference to a Section shall include all subsections beneath it bearing identical

introductory numbers.

§ 1.1.26.6 Unless specifically limited in the Contract, the words "furnish," "install," and "provide," or any combination thereof mean to furnish and incorporate into the Work, including all necessary labor, materials, and equipment and other items required to perform the Work indicated.

§ 1.2 Correlation and Intent of the Contract Documents

§ 1.2.1 The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the Contractor. The Contract Documents are complementary, and what is required by one shall be as binding as if required by all; ~~performance by the Contractor shall be required only to the extent consistent with the Contract Documents and reasonably inferable from them as being necessary to produce the indicated results. Work called for on the Drawings and not mentioned in the Specifications, or vice versa, shall be performed as though fully set forth in both. Nothing in this Section 1.2, however, shall relieve the Contractor of any of its obligations under the Contract Documents. Whenever a provision of the Contract Documents conflicts with agreements or regulations in force among members of trade associations, unions or councils, which regulate or distinguish the portions of the Work which shall or shall not be performed by a particular trade, the Contractor shall make necessary arrangements to reconcile the conflict without delay, damage, cost or recourse to the Owner. Delays in the Work resulting from the failure of the Contractor to use its best efforts to reconcile any such conflicts shall not result in an extension of the Construction Time and shall not result in the increase of the Contract Sum.~~

§ 1.2.2 Organization of the Specifications into divisions, sections and articles, and arrangement of Drawings shall not control the Contractor in dividing the Work among Subcontractors or in establishing the extent of Work to be performed by any trade. ~~Where responsibility for particular Work is required of the Contractor, the Contractor shall not be released from that responsibility by reason of the location of the Specification or Drawing information which establishes the responsibility. Thus, the Contractor shall be responsible for all Work required of it, even though that responsibility may be shown only in that portion of the documents typically pertaining to another contractor or trade. Similarly, the organization of the Contractor's duties into different phases or categories in the Agreement is for convenience only and shall not limit the generality of the Contractor's obligation to provide all of the Work whenever necessary.~~

§ 1.2.3 Unless otherwise stated in the Contract Documents, words that have well-known technical or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings. ~~All standards referred to, except as modified in the Contract Documents, shall have the same force and effect as though printed therein. These standards will not be furnished to the Contractor, as the Contractor and all members of the Construction Team are required to be familiar with their requirements.~~

§ 1.2.4 Should there be any conflicts between or within the Drawings and/or Specifications which are not resolved in writing prior to receipt of bids that which requires the highest degree of performance (quality, quantity, strength, finish, completion, complexity, cost, etc.) will be required and shall be provided at no increase in Contract Sum. All such conflicts must be referred to the Construction Manager immediately upon discovery. Failure to do so will require Contractor to perform the work at no additional cost or expense to Owner. Work not particularly detailed, marked or specified shall be the same as similar parts that are detailed, marked or specified. On certain Contract Documents, only a portion of the detail may be fully shown and the remainder indicated in outline, in which case the general detail shall be understood as applying also to other like portions of the Work. For example, if case carving, ornament, facing, veneer or similar treatment is indicated by starting of the detail, such detail must be continued throughout the course of parts in which it occurs, and to all similar parts in the Work wherever such general detail shall apply unless otherwise specifically provided in the Contract Documents.

§ 1.2.5 If there should be a conflict between two or more of the Contract Documents, the following order of interpretation shall apply:

- .1 Where requirements specifically set forth in the Agreement are in conflict with other Contract Documents, the Agreement shall govern.
- .2 Where there is conflict between the requirements of the General Conditions and the Agreement, the requirements of the Agreement shall govern, except where the requirements set forth in the Agreement are contrary to Applicable Laws, in which case the legal requirements shall govern.

- .3 Where there is a conflict among Drawings and Specifications, or among any other Contract Documents not identified in Sections 1.2.5.1 or 1.2.5.2, the conflict shall be resolved by complying with the provision that requires the better quality or greater quantity of Work to the Owner.
- .4 When a duplicate of material or equipment occurs in the Drawings, the Specifications or other Contract Documents, each Contractor shall be deemed to have bid on the basis of each furnishing such material or equipment. The Owner, Construction Manager and Architect will decide which Contractor(s) shall furnish the same and which Contract amount shall be adjusted for not incorporating such material or equipment into the Project.
- .5 Documents of a later date shall always govern, except that if a conflict exists between the Owner's Bidding Documents and the Contractor's proposal/bid the Owner's Bidding Documents shall control unless expressly modified in the Agreement.
- .6 The specific shall govern over the general.

§ 1.3 Capitalization

Terms capitalized in these General Conditions include those that are (1) specifically defined, (2) the titles of numbered articles or (3) the titles of other documents published by the American Institute of Architects.

§ 1.4 Interpretation

In the interest of brevity the Contract Documents frequently omit modifying words such as "all" and "any" and articles such as "the" and "an," but the fact that a modifier or an article is absent from one statement and appears in another is not intended to affect the interpretation of either statement.

§ 1.5 Ownership and Use of Drawings, Specifications and Other Instruments of Service

§ 1.5.1 The Architect and the Architect's consultants shall be deemed the authors and owners of their respective Instruments of Service, including the Drawings and Specifications, and will retain all common-law, statutory and other reserved rights, including copyrights. All construction plans, Drawings, Specifications, the Project Manual and other documents and like materials relating to the Project, including those in electronic form, prepared by the Architect and the Architect's consultants ("Instruments of Service" or "Project Documents") and all data used in compiling, and the results of, any tests, surveys or inspections at the Project site, as well as all photographs, Drawings, Specifications, schedules, data processing output, computer-aided design/drafting (CAD) system disks/tapes, computations, studies, audits, reports, models and other items of like kind, and all intellectual property, prepared or created for or in connection with the Project, regardless of whether they were prepared by the Owner, the Contractor, or a third party, shall constitute the Project Documents, and shall belong to the Owner. The Contractor may retain one set of the Project Documents. All copies of them, except Contractor's record set, shall be returned or suitably accounted for upon completion of the Work. They are for use solely with respect to the Project. The Contractor shall not, without the prior written consent of the Owner, use or permit anyone to use any Project Documents prepared for or in connection with the Project, or any concepts or ideas developed in connection with the Project, for any purpose other than the Project. The Owner shall at all times have access to and control over the disposition of any Project Documents pertaining to the Project.

The Contractor, Subcontractors, sub-subcontractors, and material or equipment suppliers shall not own or claim a copyright in the Project Documents or Instruments of Service. Submittal or distribution to meet official regulatory requirements or for other purposes in connection with this Project is not to be construed as publication in derogation of the Owner, Architect, or Owner's or Architect's consultants' reserved rights.

§ 1.5.2 The Contractor, Subcontractors, Sub-subcontractors, and material or equipment suppliers are authorized to use and reproduce the Instruments of Service provided to them solely and exclusively for execution of the Work. All copies made under this authorization shall bear the copyright notice, if any, shown on the Instruments of Service. The Contractor, Subcontractors, Sub-subcontractors, and material or equipment suppliers may not use the Instruments of Service on other projects or for additions to this Project outside the scope of the Work without the specific written consent of the Owner, Architect and the Architect's consultants.

§ 1.6 Transmission of Data in Digital Form

If the parties intend to transmit Project Documents or Instruments of Service or any other information or documentation in digital form, they shall endeavor to establish necessary protocols governing such transmissions, unless otherwise already provided in the Agreement or the Contract Documents.

§ 1.7 Confidentiality

§ 1.7.1 The Contractor shall not knowingly or negligently communicate or disclose at any time to any person any information concerning the Work or the Project, except: (1) with prior written consent of the Owner, (2) information which has become part of the public domain prior to the Date of the Contract, (3) information which becomes part of the public domain by means other than an unauthorized act or omission of the Contractor, (4) as may be required to perform the Work or by any Applicable Law, or (5) to its professional advisors or lender (all of whom shall be required to maintain such information in confidence.)

§ 1.7.2 The Contractor shall promptly upon the request of the Owner return and surrender to the Owner the original or legible copies of any materials, records, notices, memoranda, recordings, Drawings, Specifications and mock-ups and any other Project Documents furnished by the Owner to the Contractor.

§ 1.7.3 The Contractor shall maintain, and shall cause all members of the Construction Team, and its and their directors, officers, employees, and agents, to maintain during and after the term of the Contract, the confidentiality of all trade secrets, know-how, confidential data or other proprietary information of the Owner when designated as such and shall not use such information for any purpose whatsoever except for uses permitted by Section 1.7.1.

§ 1.7.4 The Contractor shall not identify, either expressly or by implication, the Owner, or its corporate affiliates, or use any of their trademarks, trade names, service marks, other proprietary marks, or reference the services performed under the Contract, in any advertising, press releases, publicity matters, or other promotional materials without the Owner's prior written approval.

§ 1.7.5 The Contractor shall not, without the express written consent of the Owner, discuss the Work or any part thereof with persons under circumstances in which such communications can reasonably be expected to be published in newspapers, magazines or trade journals or broadcast on radio or television. This restriction shall not apply to statements consistent with a crisis management plan development and agreed to by both parties with respect to the Work. This restriction also shall not apply to any fair response by the Contractor to publicity released by the Owner that is detrimental to the reputation of the Contractor. Any such contact shall be referred to the Owner for response. Further, without the Owner's consent, the Contractor shall not participate in professional or trade seminars or publish or submit articles for publication, the subject of which is, in whole or in part, the Work. Any such proposed article or publication shall be submitted to the Owner for review and approval, which shall not be unreasonably withheld.

§ 1.7.6 The Contractor shall cause all members of the Construction Team to specifically acknowledge that the provisions of this Section 1.7 are binding upon them.

ARTICLE 2 OWNER

§ 2.1 General

§ 2.1.1 The Owner is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The Owner shall designate in writing a representative who shall have express authority to bind the Owner with respect to all matters requiring the Owner's approval or authorization. Except as otherwise provided in Article 4, the Construction Manager and the Architect do not have such authority. The term "Owner" means the Owner or the Owner's authorized representative.

§ 2.1.2 ~~The Owner shall furnish to the Contractor within fifteen days after receipt of a written request, information necessary and relevant for the Contractor to evaluate, give notice of or enforce mechanic's lien rights. Such information shall include a correct statement of the record legal title to the property on which the Project is located, usually referred to as the site, and the Owner's interest therein.~~

§ 2.2 Information and Services Required of the Owner

§ 2.2.1 Prior to commencement of the Work, the Contractor may request in writing that the Owner provide reasonable evidence that the Owner has made financial arrangements to fulfill the Owner's obligations under the Contract. Thereafter, the Contractor may only request such evidence if (1) the Owner fails to make payments to the Contractor as the Contract Documents require; (2) a change in the Work materially ~~increases~~changes the Contract Sum; or (3) the Contractor identifies in writing a reasonable concern regarding the Owner's ability to make payment when due. ~~If requested in writing by the Contractor, the~~ Owner shall furnish such evidence as a condition precedent to commencement or continuation of the Work or the portion of the Work affected by a material change.

After the Owner furnishes the evidence, the Owner shall not materially vary such financial arrangements without prior notice to the Contractor.

§ 2.2.2 Except for permits and fees that are the responsibility of the Contractor under the Contract Documents, including, but not limited to, those required under Section 3.7.1, the Owner shall secure and pay for necessary approvals, easements, assessments and charges required for construction, use or occupancy of permanent structures or for permanent changes in existing facilities. Unless otherwise provided under the Contract Documents, the Owner, through the Construction Manager, shall secure and pay for the building permit. All permits, fees, licenses and approvals not specifically identified in the Contract or Contract Documents as the responsibility of the Owner shall be the responsibility of the Contractor.

§ 2.2.3 The Owner shall furnish surveys describing physical characteristics, legal limitations and utility locations for the site of the Project, and a legal description of the site. The Contractor shall be entitled to rely on the accuracy of information furnished by the Owner but shall exercise proper precautions relating to the safe performance of the Work. The Contractor shall not be entitled to additional compensation resulting from its failure to confirm the location of the site utilities or existing structures prior to the opening of the Contractor's bid. The Contractor shall immediately notify Owner of any errors, inaccuracies or problems which Contractor becomes aware of in the course of its use of the survey(s).

§ 2.2.4 If requested in writing by the Contractor, ~~the~~ the Owner shall furnish information or services required of the Owner by the Contract Documents with reasonable promptness. The Owner shall also furnish any other information or services under the Owner's control and relevant to the Contractor's performance of the Work with reasonable promptness after receiving the Contractor's written request for such information or services.

§ 2.2.5 Unless otherwise provided in the Contract Documents, ~~the Owner shall furnish to~~ the Contractor shall receive at least one copy of the Contract Documents for purposes of making reproductions pursuant to Section 1.5.2.

§ 2.2.6 The Owner shall endeavor to forward all communications to the Contractor through the Construction Manager and shall contemporaneously provide the same communications to the Architect about matters arising out of or relating to the Contract Documents.

§ 2.3 Owner's Right to Stop the Work

If the Contractor fails to correct Work that is not in accordance with the requirements of the Contract Documents as required by Section 12.2 or ~~repeatedly~~ fails to carry out Work in accordance with the Contract Documents, the Owner may issue a written order to the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, the right of the Owner to stop the Work shall not give rise to a duty on the part of the Owner to exercise this right for the benefit of the Contractor or any other person or entity, ~~except to the extent required by Section 6.1.3. This right shall be in addition to and not in limitation of the Owner's rights under any provision of the Contract Documents and Owner's right to stop Work shall not relieve Contractor of any of its obligations under the Contract Documents.~~

§ 2.4 Owner's Right to Carry Out the Work

If the Contractor fails, defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within a ten-day period after receipt of written notice from the Owner or the Owner's designee to commence and continue correction of such failure, default or neglect with diligence and promptness, the Owner may, without prejudice to other remedies the Owner may have, including any claim against the Contractor's Performance Bond, correct such deficiencies; provided, however, that if such failure, default or neglect results in a threat to the safety of persons or property, the Contractor shall immediately correct such failure, default or neglect. In such case an appropriate Change Order shall be issued deducting from payments then or thereafter due the Contractor the reasonable cost of correcting such deficiencies, including Owner's expenses, including any and all legal expenses incurred to effectuate and enforce this provision, and compensation for the Construction Manager's and Architect's and their respective consultants' additional services made necessary by such default, neglect or failure. ~~Such action by the Owner and amounts charged to the Contractor are both subject to prior approval of the Architect, after consultation with the Construction Manager.~~ If payments then or thereafter due the Contractor are not sufficient to cover such amounts, the Contractor shall immediately pay the difference to the Owner.

In the event the Owner directs another entity to perform Work pursuant to this Section that otherwise is the obligation of the Contractor, including correction of safety violations, either at the Contractor's request or as a result of the Contractor's failure to perform such Work, that other entity shall charge the Contractor all costs for labor, material and equipment plus that other entity's administrative, profit and overhead costs. The Contractor shall pay that other entity within ten (10) days of the date of invoice. If not paid within ten (10) days, the Contractor authorizes the Owner to withhold that amount from the Contractor and to pay the same to that other entity from the next payment due the Contractor. If payments then or thereafter due the Contractor are not sufficient to cover such amounts, the Contractor shall immediately pay the difference to the Owner.

§2.5 Limitation on Owner's Responsibility

§2.5.1 The Owner and Owner's Representative will not, under any circumstances, have control over or charge of and will not be responsible for construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the Work, since these are solely the Contractor's responsibility. Owner and Owner's Representative will not be responsible for the Contractor's failure to carry out the Work in accordance with the Contract Documents. The Owner and Owner's Representative will not have control over or charge of and will not be responsible for acts or omissions of any member of the Construction Team.

§2.5.2 The Contractor shall only be entitled to rely upon instructions and directions provided by the Owner's authorized representative(s).

§2.5.3 The Owner may, in addition to delivering them to the Architect and Construction Manager, from time to time review and approve or take other appropriate action upon the Contractor's submittals, such as Shop Drawings, Product Data and Samples, but only for the limited purpose of checking for conformance with the Owner's objectives and goals. Review of such submittals will not be conducted for the purpose of determining their accuracy and completeness of details, such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, all of which remain the responsibility of the Contractor. The Owner's review and approval of or taking other appropriate action on the Contractor's submittals shall not relieve the Contractor, the Architect or Construction Manager of any of their obligations. The Owner's approval of a specific item shall not indicate approval of an assembly of which the item is a component. The Owner's receipt of any informational submittals, of any submittals relating to equipment or system designed by the Contractor, or of any submittals relating to alternatives proposed by any member of the Construction Team shall not constitute approval of or action by the Owner on such submittals. All such submittals will be received by the Owner for record purposes only.

§2.5.4 The Owner may from time to time review or observe or take other appropriate action concerning the Work and any documents, and the selection of Subcontractors and Suppliers. The Owner's doing so shall be solely for the limited purpose of providing the Contractor with information as to how such items relate to the Owner's objectives and goals with respect to the Work and not for the purpose of determining their accuracy and completeness and shall in no way create any responsibility on the part of the Owner for or complicity by the Owner in errors, inconsistencies, or omissions, nor shall any such review, approval, other action or payment of the Contractor alter or in any way reduce the Contractor's obligations under the Contract.

ARTICLE 3 CONTRACTOR

§ 3.1 General

§ 3.1.1 The Contractor is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The Contractor shall be lawfully licensed, if required in the jurisdiction where the Project is located. The Contractor shall designate in writing a representative who shall have express authority to bind the Contractor with respect to all matters under this Contract. The term "Contractor" means the Contractor or the Contractor's authorized representative.

§ 3.1.2 The plural term "Multiple Prime Contractors" refers to persons or entities who perform construction under contracts with the Owner that are administered by the Construction Manager. The term does not include the Owner's own forces, including persons or entities under separate contracts not administered by the Construction Manager.

§ 3.1.3 The Contractor shall perform the Work in accordance with the Contract Documents.

§ 3.1.4 The Contractor shall not be relieved of obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the Owner, Construction Manager or Architect in their administration of

the Contract or the Contract Documents, or by tests, inspections or approvals required or performed by persons or entities other than the Contractor.

§ 3.1.5 These General Conditions refer to the relationship between the Owner and Contractor. As to the contract between the Contractor and its Subcontractors, the General Conditions shall be read as the Contractor having the position of the Owner and the Subcontractors having the position of the Contractor. The Subcontractors are bound to the Contractor just as the Contractor is bound to the Owner. The Subcontractor shall have all the rights, duties and obligations to the Contractor as the Contractor has rights, duties and obligations to the Owner. The Subcontractors shall agree to and accept the same responsibility to the Owner as the Contractor. In the event any failure of a Subcontractor causes any type of injury or loss to the Owner, direct or indirect, the Contractor shall be jointly and severally liable to the Owner for such injury or damage in addition to any responsibility or liability of the Subcontractor.

§ 3.2 Review of Contract Documents and Field Conditions by Contractor

§ 3.2.1 Execution of the Contract by the Contractor is a representation that the Contractor has visited the Project site, become generally familiar with local conditions (including weather conditions) under which the Work is to be performed and correlated personal observations with requirements of the Contract Documents.

§ 3.2.2 Because the Contract Documents are complementary, the Contractor shall, before starting each portion of the Work, carefully study and compare the various Contract Documents relative to that portion of the Work, as well as the information furnished by the Owner pursuant to Section 2.2.3, shall take field measurements of any existing conditions related to that portion of the Work, and shall observe any conditions at the Project site affecting it. These obligations are for the purpose of facilitating coordination and construction by the Contractor and are not for the purpose of discovering errors, omissions, or inconsistencies in the Contract Documents; however, the Contractor shall promptly report to the Construction Manager and Architect any errors, inconsistencies or omissions discovered by or made known to the Contractor as a request for information submitted to the Construction Manager in such form as the Construction Manager and Architect may require. It is recognized that the Contractor's review is made in the Contractor's capacity as a contractor and not as a licensed design professional, unless otherwise specifically provided in the Contract Documents. Failure by the Contractor to report to, or request clarification from, the Architect and Construction Manager of any errors, omissions or inconsistencies shall result in interpreting and resolving such errors, omissions or inconsistencies in favor of the Owner and with no additional compensation to the Contractor.

§ 3.2.3 The Contractor is not required to ascertain that the Contract Documents are in accordance with a ~~Applicable~~ Laws, ~~statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities,~~ but the Contractor shall promptly report to the Construction Manager and Architect any nonconformity discovered by or made known to the Contractor as a request for information submitted to Construction Manager in such form as the Construction Manager and Architect may require.

§ 3.2.4 If the Contractor believes that additional cost or time is involved because of clarifications or instructions the Architect issues in response to the Contractor's notices or requests for information pursuant to Sections 3.2.2 or 3.2.3, the Contractor shall make Claims as provided in Article 15. If the Contractor fails to perform the obligations of Sections 3.2.2 or 3.2.3, the Contractor shall pay such costs and damages to the Owner as would have been avoided if the Contractor had performed such obligations. If the Contractor performs those obligations, the Contractor shall not be liable to the Owner or Architect for damages resulting from errors, inconsistencies or omissions in the Contract Documents, for differences between field measurements or conditions and the Contract Documents, or for nonconformities of the Contract Documents to a ~~Applicable L~~aws, ~~statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities.~~ If the Contractor permits any construction activity to be performed that involves an error, inconsistency or omission in the Contract Documents or a physical condition at the Project site it recognized or should, employing the degree of diligence required of that Contractor under the Contract Documents, have recognized without providing notice to the Owner and receiving authorization to proceed, the Contractor shall assume responsibility for such performance and bear all costs attributable to correction, without recovery, whether under the Contract Sum or otherwise. The Contractor shall not be liable to the Owner or Construction Manager or Architect for damages resulting from errors, inconsistencies or omissions in the Contract Documents or for differences between field measurements or conditions and the Construction Documents unless the Contractor recognized such errors, inconsistency, omission or difference and knowingly failed to report such to the Architect and Construction Manager.

§ 3.2.5 Prior to submitting its bid, the Contractor shall have studied and compared the Contract Documents and shall have reported to the Architect any error, inconsistency or omission in the Contract Documents. It will be presumed that the Contractor's bid and the Contract Sum include the cost of correcting any such error, inconsistency or omission, which could have been discovered by the exercise of reasonable diligence. Unless the Contractor establishes that such error, inconsistency or omission could not have been discovered by the exercise of reasonable diligence, the Contractor will make such corrections without additional compensation so that the Work is fully functional.

§ 3.3 Supervision and Construction Procedures

§ 3.3.1 The Contractor shall supervise and direct the Work, using the Contractor's best skill and attention. The Contractor shall be solely responsible for, and have control over, construction means, methods, techniques, sequences and procedures and for coordinating all portions of the Work under the Contract, unless the Contract Documents give other specific instruction concerning these matters. If the Contract Documents give specific instructions concerning construction means, methods, techniques, sequences or procedures, the Contractor shall evaluate the jobsite safety thereof and, except as stated below, shall be fully and solely responsible for the jobsite safety of such means, methods, techniques, sequences or procedures. If the Contractor determines that such means, methods, techniques, sequences or procedures may not be safe, the Contractor shall give timely written notice to the Owner, the Construction Manager, and the Architect and shall not proceed with that portion of the Work without further written instructions from the Architect, through the Construction Manager. If the Contractor is then instructed to proceed with the required means, methods, techniques, sequences or procedures without acceptance of changes proposed by the Contractor, the Owner shall be solely responsible for any loss or damage arising solely from those Owner-required means, methods, techniques, sequences or procedures.

§ 3.3.2 The Contractor shall be responsible to the Owner for acts and omissions of the Contractor's employees, Subcontractors, Subcontractors at any tier, and their respective agents and employees, and other persons performing portions of the Work for, or on behalf of, the Contractor or any of its Subcontractors.

§ 3.3.3 The Contractor shall be responsible for inspection of portions of the Project already performed to determine that such portions are in proper condition to receive subsequent Work.

§ 3.4 Labor and Materials

§ 3.4.1 Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work. Such provision of labor and materials shall occur in sufficient time to satisfy the existing Project schedule. The Contractor bears the risk of any failure to timely provide such labor and materials for any reason. The Contractor agrees to execute the appropriate UCC forms to effectuate the Owner's ownership of the material and equipment furnished pursuant to the Contract.

§ 3.4.2.1 By making requests for substitutions based on Subsection 3.4.2 above, the Contractor:

- (1) Represents that the Contractor has personally investigated the proposed substitute product and determined that it is equal or superior in all respects to that specified;
- (2) Represents that the Contractor will provide the same warranty for the substitution that the Contractor would for that specified;
- (3) Certifies that the cost data presented is complete and includes all related costs, including but not limited to the Architect's redesign costs; and waives all claims for additional costs related to the substitution which subsequently became apparent; and
- (4) Will coordinate the installation of the accepted substitute, making such changes as may be required for the Work to be completed in all respects.

§ 3.4.2 Except in the case of minor changes in the Work authorized by the Architect in accordance with Sections 3.12.8 or 7.4, the Contractor may make substitutions only with the prior written consent of the Owner, after evaluation by the Architect, in consultation with the Construction Manager, and in accordance with a Change Order or Construction Change Directive.

§ 3.4.3 The Contractor shall enforce strict discipline and good order among the Contractor's employees and other persons carrying out the Work. The Contractor shall not permit employment of unfit persons or persons not properly skilled in tasks assigned to them. The Contractor shall only employ labor on the Project or in connection with the Work capable of working harmoniously with all trades, crafts and any other contractors and individuals associated with the Project. The Contractor shall also minimize the likelihood of any strike, work stoppage or other labor disturbance.

§ 3.4.4 The Contractor agrees that neither it nor its Subcontractors, Sub-subcontractors, and their respective agents and employees, and other persons performing portions of the Work for, or on behalf of, the Contractor, will discriminate against any employee or applicant for employment, to be employed in the performance of the Work under the Contract, with respect to hire, tenure, conditions or privilege of employment, or any matter directly or indirectly related to employment, because of race, age, sex, color, religion, national origin, ancestry or physical disability. Breach of this covenant may be regarded as a material breach of the Contract.

§ 3.4.5 ASBESTOS, PCB, LEAD, and Urea Formaldehyde-FREE PRODUCT INSTALLATION

§ 3.4.5.1 It is hereby understood and agreed that no product, substance, or material containing or treated with asbestos, including chrysolite, amosite, crocidolite, tremolite asbestos, anthophyllite asbestos, actinolite asbestos, asbestos in vermiculite, erionite, and taconite (hereinafter collectively "asbestos"), polychlorinated biphenyls (PCB), lead at or in excess of any limits imposed by Applicable Laws, or urea formaldehyde and any combination of these substances shall be installed or introduced into the Work by the Contractor, its employees, Subcontractors, Sub-subcontractors at any tier, and their respective agents and employees, and other persons performing portions of the Work for, or on behalf of, the Contractor or any of its Subcontractors or Sub-subcontractors at any tier or other individuals or entities over whom the Contractor has control. The Contractor shall be required to provide a signed certification statement ensuring that all products or materials installed or introduced into the Work all be asbestos, PCB, lead (as stated above), and Urea Formaldehyde-free.

§ 3.4.5.2 The Contractor shall also be required to furnish certified statements from the manufacturers of supplied materials used during construction verifying their products or materials to be asbestos, PCB, lead, and Urea-Formaldehyde-free in accordance with the requirements of Section 3.4.5.1.

§ 3.4.5.3 The Contractor shall complete and submit to the Owner a certification evidencing asbestos, PCB, lead, and Urea Formaldehyde-free product and material installation prior to issuance of the final Certificate for Payment, in a form acceptable to the Owner.

§ 3.5 Warranty

The Contractor warrants to the Owner, Construction Manager, and Architect that materials and equipment furnished under the Contract will be of good quality and new unless the Contract Documents require or permit otherwise. The Contractor further warrants that the Work will conform with the requirements of the Contract Documents and will be free from defects, except for those inherent in the quality of the Work the Contract Documents require or permit. Work, materials, or equipment not conforming to these requirements may be considered defective. The Contractor's warranty excludes remedy for damage or defect caused by abuse, alterations to the Work not executed by the Contractor, improper or insufficient maintenance, improper operation, or normal wear and tear and normal usage. If required by the Construction Manager or Architect, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment. In addition to any other warranties, guarantees or obligations set forth in the Contract Documents or applicable as a matter of a law and not in limitation of the terms of the Contract Documents, the Contractor warrants and guarantees that:

- .1 The Owner will have good title to the Work and all materials and equipment incorporated into the Work and, unless otherwise expressly provided in the Contract Documents, will be new;
- .2 The Work and all materials and equipment incorporated into the Work will be free from all defects, including any defects in workmanship or materials;

- .3 The Work and all equipment incorporated into the Work will be fit for the purpose for which they are intended;
- .4 The Work and all materials and equipment incorporated into the Work will be merchantable; and
- .5 The Work and all materials and equipment incorporated into the Work will conform in all respects to the Contract Documents.

Upon notice of the breach of any of the foregoing warranties or guarantees or any other warranties or guarantees under the Contract Documents, the Contractor, in addition to any other requirements in the Contract Documents, will commence to correct such breach within seventy-two (72) hours after written notice thereof and thereafter will use its best efforts to correct such breach to the satisfaction of the Owner; provided that if such notice is given after final payment hereunder, such seventy-two (72) hour period shall be extended to seven (7) days. The foregoing warranties and obligations of the Contractor shall survive the final payment and/or termination of the Contract.

§ 3.5.1 The Contractor shall assign and or pass-through to the Owner at the time of Substantial Completion any and all manufacturer's warranties relating to materials and labor used in the Work. Contractor shall perform the Work in a manner that will preserve any and all manufacturer's warranties. The Contractor further warrants that the Work will conform with the requirements of the Contract Documents and will be free from defects, except for those inherent in the quality of the Work the Contract Documents require or permit. Work, materials, or equipment not conforming to these requirements may be considered defective. The Contractor's warranty excludes remedy for damage or defect caused by abuse, alterations to the Work not executed by the Contractor, improper or insufficient maintenance, improper operation, or normal wear and tear and normal usage. If required by the Construction Manager or Architect, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment. All warranties shall be in the form and substance required by the Owner and/or Contract Documents.

§ 3.5.2 If the Contractor uses any portion of the Work or the Owner's other property, such items will be restored to the condition they were in immediately prior to such use at or before the time of Substantial Completion, or as otherwise specified in the Contract Documents. The Contractor's warranty and agreement to correct defective Work includes the Contractor's obligations under this Section.

§ 3.6 Taxes

The Contractor shall pay sales, consumer, use and similar taxes for the Work or portions thereof provided by the Contractor that are legally enacted when bids are received or negotiations concluded, whether or not yet effective or merely scheduled to go into effect. The Contract Sum includes all applicable taxes and the Contract Sum shall not be modified as a result of Contractor's failure to include all such applicable taxes, or a change in Contractor's tax liability. The Contractor shall pay all state and federal taxes levied on its business, income or property and shall make all contributions for social security and other wage or payroll taxes. The Contractor shall be solely responsible for such payments and shall indemnify the Owner and hold it harmless from any assessment and payment of the same.

§ 3.7 Permits, Fees, Notices, and Compliance with Laws

§ 3.7.1 Unless otherwise provided in the Contract Documents, the Owner, through the Construction Manager, shall secure and pay for the building permit. The Contractor shall secure and pay for other permits, fees, licenses and inspections by government agencies necessary for proper execution and completion of the Work that are customarily secured after execution of the Contract and legally required at the time bids are received or negotiations concluded.

§ 3.7.2 The Contractor shall comply with and give notices required by ~~a~~Applicable ~~l~~Laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities applicable to performance of the Work.

§ 3.7.3 If the Contractor performs Work ~~knowing it to be~~ contrary to ~~a~~Applicable ~~l~~Laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, the Contractor shall assume appropriate responsibility for such Work and shall bear the costs attributable to correction.

§ 3.7.4 Concealed or Unknown Conditions. If the Contractor encounters conditions at the Project site that are (1) subsurface or otherwise concealed physical conditions that differ materially from those indicated in the Contract Documents or (2) unknown physical conditions of an unusual nature that differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, the Contractor shall promptly provide written and dated notice to the Owner, Construction Manager, and the Architect before conditions are disturbed and in no event later than 21 days after first observance of the conditions.

The Architect and Construction Manager will promptly investigate such conditions and, if the Owner and the Architect, in consultation with the Construction Manager, determines that they differ materially and cause an increase or decrease in the Contractor's cost of, or time required for, performance of any part of the Work, will recommend an equitable adjustment in the Contract Sum or Contract Time, or both. If the Architect, in consultation with the Construction Manager, determines that the conditions at the Project site are not materially different from those indicated in the Contract Documents and that no change in the terms of the Contract is justified, the Architect shall promptly notify the Owner, Construction Manager, and Contractor in writing, stating the reasons. If the Owner or Contractor disputes the Architect's determination or recommendation, either party may the Contractor shall proceed as provided in Article 15. The Contractor shall be on alert to any indication or evidence of existing underground or concealed utilities or structures not shown on the Contract Documents and shall immediately notify the Owner of discovery of such evidence. If the Contractor encounters such utilities or structures, it shall cease operations immediately to minimize damage and shall notify the Owner, Architect and Construction Manager. The Contractor shall bear the cost of damage resulting from its failure to exercise reasonable care in its construction activity or from continuing operations without notifying the Owner.

§ 3.7.5 If, in the course of the Work, the Contractor encounters human remains or recognizes the existence of burial markers, archaeological sites or wetlands not indicated in the Contract Documents, the Contractor shall immediately suspend any operations that would affect them and shall notify provide written and dated notification to the Owner, Construction Manager, and Architect. Upon receipt of such notice, the Owner shall promptly take any action necessary to obtain governmental authorization required to resume the operations. The Contractor shall continue to suspend such operations until otherwise instructed by the Owner but shall continue with all other operations that do not affect those remains or features. Requests for adjustments in the Contract Sum and Contract Time arising from the existence of such remains or features may be made, as needed, as provided in Article 15.

§ 3.8 Allowances

§ 3.8.1 The Contractor shall include in the Contract Sum all allowances stated in the Contract Documents. Items covered by allowances shall be supplied for such amounts and by such persons or entities as the Owner may direct, but the Contractor shall not be required to employ persons or entities to whom the Contractor has reasonable objection.

§ 3.8.2 Unless otherwise provided in the Contract Documents:

- .1 Allowances shall cover the cost to the Contractor of materials and equipment delivered at Project the site and all required taxes, less applicable trade discounts;
- .2 Contractor's costs for unloading and handling at the Project site, labor, installation costs, overhead, profit and other expenses contemplated for stated allowance amounts shall be included in the Contract Sum but not in the allowances; and
- .3 Whenever costs are more than or less than allowances, the Contract Sum shall be adjusted accordingly by Change Order. The amount of the Change Order shall reflect (1) the difference between actual costs and the allowances under Section 3.8.2.1 and (2) changes in Contractor's costs under Section 3.8.2.2.

§ 3.8.3 Materials and equipment under an allowance shall be selected by the Owner with reasonable promptness.

§ 3.9 Superintendent

§ 3.9.1 The Contractor shall employ a competent superintendent and necessary assistants who shall be in attendance at the Project site during performance of the Work. The superintendent shall represent the Contractor, and communications given to the superintendent shall be as binding as if given to the Contractor. Superintendent shall be on site and provide adequate supervision over the Work covered under the Contract. The superintendent shall be satisfactory to the Owner in all respects, and the Owner shall have the right to require the Contractor to remove any superintendent from the Project whose performance is not satisfactory to the Owner and to replace such superintendent with a superintendent who is satisfactory to the Owner, and without additional cost or compensation to the Owner.

§ 3.9.2 The Contractor, as soon as practicable after award of the Contract, shall furnish in writing to the Owner and Architect through the Construction Manager, the name and qualifications of a proposed superintendent. The Owner and/or Construction Manager may reply within 14 days to the Contractor in writing stating (1) whether the Owner, the Construction Manager, or the Architect has reasonable objection to the proposed superintendent or (2) that any

of them require additional time to review. ~~Failure of the Construction Manager to reply within the 14 day period shall constitute notice of no reasonable objection.~~

§ 3.9.3 The Contractor shall not employ a proposed superintendent to whom the Owner, Construction Manager or Architect has made reasonable and timely objection. The Contractor shall not change the superintendent without the Owner's prior written consent, ~~which shall not unreasonably be withheld or delayed except with another superintendent who is satisfactory to the Owner.~~

§ 3.10 Contractor's Construction Schedules

§ 3.10.1 The Contractor, promptly after being awarded the Contract, or at other times requested by Owner or set forth in the Contract, shall prepare and submit for the Owner's and Architect's information and the Construction Manager's approval a ~~Contractor's proposed e~~Construction ~~s~~Schedule for the Work. The schedule shall not exceed time limits current under the Contract Documents, shall be revised at appropriate intervals as required by the conditions of the Work and Project, shall be related to the entire Project schedule to the extent required by the Contract Documents, and shall provide for expeditious and practicable execution of the Work. In no event shall the Contractor's Construction Schedule be extended due to action or inaction of the Contractor, except with prior written approval of the Owner within the Owner's sole discretion. The Contractor shall cooperate with the Construction Manager in scheduling and performing the Contractor's Work to avoid conflict with, and as to cause no delay in, the work or activities of other Multiple Prime Contractors or the construction or operations of the Owner's own forces. The Construction Schedule shall be in a detailed format satisfactory to the Owner which shall also: (1) provide a graphic representation coordinating and sequencing all activities and events that will occur during performance of the Work; (2) identify each phase of construction and occupancy; (3) set forth Milestone Dates and manpower loading. Upon review and acceptance by the Owner, the Construction Schedule shall be deemed part of the Contract Documents and shall not be subject to change except in accordance with Section 8.3 and Article 7. If it is not approved, the Construction Schedule shall be promptly revised by the Contractor in accordance with the recommendations of the Owner and Architect and resubmitted for approval.

§ 3.10.2 The Contractor shall prepare a submittal schedule, promptly after being awarded the Contract and thereafter update it as necessary to maintain a current submittal schedule, and shall submit the schedule(s) for the Construction Manager's, Owner's and Architect's approval. ~~The Architect and Construction Manager's~~ which approval shall not unreasonably be delayed or withheld. The submittal schedule shall (1) be coordinated with the Contractor's construction schedule, ~~and~~ (2) allow the Construction Manager and Architect reasonable time to review submittals, and (3) shall provide for expeditious and practical execution of the Work. If the Contractor fails to submit a submittal schedule, the Contractor shall not be entitled to any increase in Contract Sum or extension of Contract Time based on the time required for review of submittals.

§ 3.10.3 The Contractor shall participate with other ~~C~~contractors, the Construction Manager and Owner in reviewing and coordinating all schedules for incorporation into the Project schedule that is prepared by the Construction Manager. The Contractor shall make revisions to the construction schedule and submittal schedule as deemed necessary by the Construction Manager to conform to the Project schedule.

§ 3.10.4 The Contractor shall proceed strictly (not substantially) in accordance with the Construction Schedule. The Contractor shall monitor the progress of the Work for conformance with the requirements of the Construction Schedule and shall promptly advise the Owner of any delay or potential delays. If any progress report indicates any delays, the Contractor shall, at no cost to the Owner, propose an affirmative plan to correct the delay, including overtime and/or additional labor, if necessary. In no event shall any progress report constitute an adjustment of the Contract Time or any Milestone Date or the Construct Sum unless any such adjustment is agreed to by the Owner and authorized pursuant to a Change Order. The Contractor shall perform the Work in general accordance with the most recent schedules submitted to the Owner, Construction Manager and Architect and incorporated into the approved Project schedule.

§ 3.10.5 The Contractor shall cooperate with the Construction Manager in scheduling and performing its Work to avoid conflict or interference with the Work of others, and shall be responsible for any such conflict or interferences caused. The Construction Manager and the Contractor acknowledge and understand that the work schedule will be modified from time-to-time to work around the work of other Contractors, in an effort to avoid conflicts or interference in the work of the Construction Manager or other contractors, and that such schedule changes do not give rise to a claim for damages by the Contractor for delay or otherwise. If the Construction Manager's schedule for the Work is revised, the

Contractor shall conform to the most recent schedule. The Contractor acknowledges that the Construction Manager's schedule may change during the duration of the Project and that fact was taken into account by the Contractor when it agreed to the Contract Sum and entered into this Contract under the terms of the conditions set forth herein. As a result, the Contractor shall not be entitled to any additional monies or damages as a result of such schedule changes and the Contractor agrees that the Project Schedule, as modified, shall be an accepted term and contractual requirement. The Contractor shall complete work in accordance with the Project Schedule and Milestone Schedule(s).

§ 3.10.6 The Contractor shall cooperate with the Construction Manager in working out the proper sequence of operations between the Work of the Contractor and that of other trades on the Project site. The Contractor acknowledges that the Construction Manager's schedule for the Work may change during the duration of the Project and the Contractor took that fact into account when it entered into the Contract. As a result, the Contractor shall not be entitled to any additional monies or damages as a result of such schedule changes.

§ 3.10.7 Contractor shall prosecute the Work undertaken in a prompt and diligent manner whenever such Work, or any part of it, becomes available, or at such other time or times as the Construction Manager may direct so as to promote the general progress of the entire construction. The Contractor shall not, by delay or otherwise, interfere with or hinder the Work of the Construction Manager or any other Contractor. Any materials that are to be furnished by the Contractor shall be furnished in sufficient time to enable the Contractor to perform and complete its Work within the time or times provided in the schedule. If the Contractor shall, through its action or inactions, including the actions or inactions of its' Subcontractors or suppliers, fall behind in furnishing necessary labor and/or materials to meet the construction needs in accordance with the established schedule, then it shall increase its forces or work such overtime as may be required, at its own expense, to bring its part of the Work up to the proper schedule. In the event that Contractor does not take such action necessary to bring its part of the Work up to schedule, as determined by the Construction Manager, within twenty-four (24) hours of receiving notice from Construction Manager, then, Construction Manager, as allowed by law and with Owner's written consent, may supplement Contractor's forces or remove Contractor from the Project and retain others to complete part or all of the remainder of Contractor's Work. Contractor shall be responsible for any and all costs of performing or completing the Work. Contractor shall pay any such sums within ten (10) days of date of invoice. If not paid within ten (10) days, the amount will be withheld from Contractor and paid to the relevant parties from next payment due Contractor.

§ 3.11 Documents and Samples at the Site

The Contractor shall maintain at the Project site for the Owner one copy of the Drawings, Specifications, Addenda, Change Orders and other Modifications, in good order and marked currently to indicate field changes and selections made during construction, and one copy of approved Shop Drawings, Product Data, Samples and similar required submittals. These documents shall be available to the Architect and delivered to the Construction Manager for submittal to the Owner upon completion of the Work as a record of the Work, as constructed, together with a certification that they are "as-built" documents.

§ 3.12 Shop Drawings, Product Data and Samples

§ 3.12.1 Shop Drawings are drawings, diagrams, schedules and other data specially prepared for the Work by the Contractor or a Subcontractor, Sub-subcontractor, manufacturer, supplier or distributor to illustrate some portion of the Work.

§ 3.12.2 Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by the Contractor to illustrate materials or equipment for some portion of the Work. All Work shall be furnished and installed in accordance with the Drawings, Specifications and as additionally required by the manufacturer's printed instructions. The Contractor shall review the manufacturer's instructions, and where conflict occurs between the Drawings or Specifications and the manufacturer's instructions, the Contractor shall request clarification from the Architect prior to commencing the Work.

§ 3.12.3 Samples are physical examples that illustrate materials, equipment or workmanship and establish standards by which the Work will be judged.

§ 3.12.4 Shop Drawings, Product Data, Samples and similar submittals are not Contract Documents. Their purpose is to demonstrate the way by which the Contractor proposes to conform to the information given and the design concept expressed in the Contract Documents for those portions of the Work for which the Contract Documents require submittals. Review by the Architect and Construction Manager is subject to the limitations of Sections 4.2.9

through 4.2.11. Informational submittals upon which the Construction Manager and Architect are not expected to take responsive action may be so identified in the Contract Documents. Submittals that are not required by the Contract Documents may be returned by the Construction Manager or Architect without action.

§ 3.12.5 The Contractor shall review for compliance with the Contract Documents, approve and submit to the Construction Manager Shop Drawings, Product Data, Samples and similar submittals required by the Contract Documents in accordance with the Project submittal schedule approved by the Owner, Construction Manager and Architect, or in the absence of an approved Project Construction Schedule and submittal schedule, with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of other Multiple Prime Contractors or the Owner's own forces. The Contractor shall cooperate with the Construction Manager in the coordination of the Contractor's Shop Drawings, Product Data, Samples and similar submittals with related documents submitted by other Multiple Prime Contractors.

§ 3.12.5.1 The Contractor shall check thoroughly all such submittals, including those it prepares itself, as to measurements, sizes of members, materials and all other details, to assure that they conform to the intent of the Contract Documents.

§ 3.12.5.2 The Contractor shall promptly return to the Subcontractors and/or Suppliers, for correction, any of the submittals that are found inaccurate or otherwise erroneous be corrected.

§ 3.12.5.3 After the Contractor has checked and approved such submittals, the Contractor shall place thereon the date of its approval and the legible signature of the individual who reviewed them and shall then submit them to the Construction Manager and Architect for review. The Construction Manager and/or Architect may refuse to check or review any submittals, which are not submitted in compliance with these requirements.

§ 3.12.5.4 Submittals describing manufactured equipment must be "Project Specific." Every submission copy must be clearly marked to fully define the intended model number, configuration and other applicable product information.

§ 3.12.5.5 Among other things, the Contractor shall be responsible for the constructability, content, completeness and consistency of all submittals.

§ 3.12.5.6 The Contractor shall notify the Owner when submittals are received. It shall deliver copies to the Owner upon request.

§ 3.12.5.7 The Contractor shall notify the Owner and the Construction Manager and Architect in writing if any submittals appear to modify the requirements of the Contract Documents. This notice shall identify each and every change.

§ 3.12.5.8 The Contractor shall furnish to the Architect for review when requested, or when required by the Contract Documents, samples of all materials and finishes to be used in the execution of the Work. Such samples shall be of sufficient size to be representative and the required number of them shall be submitted before the Work utilizing the materials they exemplify is commenced and in ample time to permit examination thereof. In all cases, samples shall be submitted at least three (3) weeks prior to when approval is needed to maintain the progress required by the Construction Schedule. All materials furnished and finishes applied to the Work shall be fully equal to the submitted samples.

- .1 Samples shall be forwarded to the Construction Manager and Architect with all shipping charges prepaid. Unless otherwise directed, samples shall be submitted in triplicate, boxed or wrapped properly, each labeled with the name, type or brand of the materials, its place of origin, the names of its producer, Contractor and the Project.
- .2 The approval of Samples is generally directed towards establishing quality, color and finish criteria, and does not modify the requirements of the Contract Documents at to dimensions or design.

§ 3.12.6 By submitting Shop Drawings, Product Data, Samples and similar submittals, the Contractor represents to the Owner, Construction Manager, and Architect, that the Contractor has (1) reviewed and approved them, (2) determined and verified materials, field measurements and field construction criteria related thereto, or will do so

and (3) checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents.

§ 3.12.6.1 The Architect will check and review the submittals with reasonable promptness and within any time limits agreed upon in writing and will return them as hereinafter described, indicating by notation, or by written instructions, or other directions, any corrections, which in the judgment of the Construction Manager and Architect, may be necessary to meet the requirements of the Contract Documents. The Contractor shall then review such notations, instructions, or directions, and if the Contractor concurs therein, shall make or have made such corrections, and shall, when so noted on the submittals or requested by the Construction Manager and Architect, resubmit corrected submittals to the Construction Manager and Architect as soon as possible, for final check and review. Such final check and review by the Construction Manager and Architect of submittals so corrected and resubmitted will be limited to the corrections only, and the Contractor, by such resubmission shall be held to have represented that such submittals contain no other alterations, additions, or deletions, unless the Contractor, in writing, directs the Construction Manager and Architect's specific attention to same. Should the Contractor question or disagree with such notations, instructions, or directions, the Contractor shall direct the Architect's attention to same for further clarification before resubmitting them. Corrections or changes indicated on submittals shall not be construed as an order for a change in the Work or to perform extra work.

§ 3.12.6.2 The Construction Manager and Architect's review of submittals is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment of systems, all of which remain the responsibility of the Contractor. The Construction Manager and Architect do not assume responsibility for errors, omissions or deviations from the Contract Documents contained in such submittals. Any such errors, omissions or deviations from the Contract Documents must be corrected by the Contractor, irrespective of the receipt and review of the submittals by the Architect, and even through the Work is done in accordance with such submittals, unless such error, omission or deviation from the Contract Documents is specifically called to the Construction Manager and Architect's attention by the Contractor in a separate written letter of communication, at the time of submittal, and the Construction Manager and Architect has given written approval of such error, omission or deviation.

§ 3.12.7 The Contractor shall perform no portion of the Work for which the Contract Documents require submittal and review of Shop Drawings, Product Data, Samples or similar submittals until the respective submittal has been reviewed and approved by the Architect.

§ 3.12.8 The Work shall be in accordance with approved submittals except that the Contractor shall not be relieved of responsibility for deviations from requirements of the Contract Documents by the Architect's review and approval of Shop Drawings, Product Data, Samples or similar submittals unless the Contractor has specifically informed the Construction Manager and Architect in a detailed writing of such deviation at the time of submittal and (1) the Architect has given written approval to the specific deviation as a minor change in the Work, or (2) a Change Order or Construction Change Directive has been issued authorizing the deviation. The Contractor shall not be relieved of responsibility for errors or omissions in Shop Drawings, Product Data, Samples or similar submittals by the Architect's approval thereof.

§ 3.12.8.1 Any proposed substitution which requires modification of any details on the Drawings, or which affects other work, to cause modification to that work, shall be accompanied by detailed Drawings from the proposer showing changes in the affected details. All cost for changes to the Contract Documents, and necessary changes in the work of others will be paid by the proposing Contractor.

§ 3.12.9 The Contractor shall direct specific attention, in writing or on resubmitted Shop Drawings, Product Data, Samples or similar submittals, to revisions other than those requested by the Construction Manager and Architect on previous submittals. In the absence of such written notice, the Architect's approval of a resubmission shall not apply to such revisions.

§ 3.12.10 The Contractor shall not be required to provide professional services that constitute the practice of architecture or engineering unless such services are specifically required by the Contract Documents for a portion of the Work or unless the Contractor needs to provide such services in order to carry out the Contractor's responsibilities for construction means, methods, techniques, sequences and procedures. The Contractor shall not be required to provide professional services in violation of applicable law. If professional design services or

certifications by a design professional related to systems, materials or equipment are specifically required of the Contractor by the Contract Documents, the Owner and the Architect will specify all performance and design criteria that such services must satisfy. The Contractor shall cause such services or certifications to be provided by a properly licensed design professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, Shop Drawings and other submittals prepared by such professional. Shop Drawings and other submittals related to the Work designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to the Architect. The Owner and the Architect shall be entitled to rely upon the adequacy, accuracy and completeness of the services, certifications and approvals performed or provided by such design professionals, provided the Owner and Architect have specified to the Contractor all performance and design criteria that such services must satisfy. Pursuant to this Section 3.12.10, the Architect will review, approve or take other appropriate action on submittals only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. The Contractor shall not be responsible for the adequacy of the performance and design criteria specified in the Contract Documents.

§ 3.12.11 The Architect's review of shop drawings and samples does not constitute or imply final acceptance of materials, equipment, etc. actually furnished or installed if such should be defective or not as represented by reviewed shop drawings and/or samples.

§ 3.12.12 Owner will provide shop drawings to Contractor for all fabricated materials, specialty items, pre-purchased equipment, etc. which will be furnished by Owner for installation by Contractor. Contractor must give Owner at least three (3) days' notice prior to time drawings will be required.

§ 3.12.13 The Architect's Basic Services under its agreement with the Owner limits the review of the Contractor's submittals to an initial submittal and two re-submittals. Services by the Architect for review of additional re-submittals shall be billed to and paid directly to the Architect by the Contractor; provided however, Architect shall give notice to Contractor prior to the commencement of such services for which Contractor will be liable.

§ 3.13 Use of Site

§ 3.13.1 The Contractor shall confine operations at the Project site to areas permitted by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities and the Contract Documents and shall not unreasonably encumber the Project site with materials or equipment. Only materials and equipment which are to be used for the Project or carry out the Work shall be stored at the Project site. Protection of such materials and equipment shall be the sole responsibility of the Contractor. No off-site storage is permitted without the Owner's prior written consent.

§ 3.13.2 The Contractor shall coordinate the Contractor's operations with, and secure the approval of, the Construction Manager before using any portion of the Project site. No one except the Owner is permitted to connect to or activate any utility services in any building or facility owned or occupied by the Owner. When such connection or activation services are required, the Owner shall be contacted, and unless otherwise specifically provided in the Contract Documents all such work shall be performed by Owner's personnel. In all cases, the Contractor shall give notice of the need for such services, to the Owner, in a timely manner (at least seventy-two [72] hours in advance) in order to avoid delays to the Project's progress.

§ 3.13.3 The control of the use of the Project site will be through the Construction Manager. Contractors are responsible for cooperation in all matters involving the use of the Project site. The Contractor shall ensure that the Work is at all times performed in a manner that affords the Owner, the Construction Manager, the Architect, and the Owner's separate contractors reasonable access, both vehicular and pedestrian, to the Project Site and all adjacent areas. The Work shall be performed, to the fullest extent reasonably possible, in such a manner that public areas adjacent to the Project site shall be free from all debris, building materials and equipment. Without limiting any other provision of the Contract Documents, the Contractor shall use its best efforts to minimize any interference with the occupancy or beneficial use of (1) any areas and buildings adjacent to the Project site or (2) portions of the Project in which Work is not being carried out in the event of partial occupancy.

§ 3.14 Cutting and Patching

§ 3.14.1 The Contractor shall be responsible for cutting, fitting or patching required to complete the Work or to make its parts fit together properly. All areas requiring cutting, fitting and patching shall be restored to the condition existing prior to the cutting, fitting and patching, unless otherwise required by the Contract Documents. Only skilled tradespersons shall perform any cutting, fitting or patching work.

§ 3.14.2 The Contractor shall not damage or endanger a portion of the Work or fully or partially completed construction of the Owner's own forces or of other Multiple Prime Contractors by cutting, patching, or otherwise altering such construction, or by excavation. The Contractor shall not cut or otherwise alter such construction by the Owner's own forces or by other Multiple Prime Contractors except with written consent of the Construction Manager, Owner and such other Multiple Prime Contractors; such consent shall not be unreasonably withheld. The Contractor shall not unreasonably withhold from the other Multiple Prime Contractors or the Owner the Contractor's consent to cutting or otherwise altering the Work.

§ 3.15 Cleaning Up

§ 3.15.1 The Contractor, its employees, Subcontractors, Sub-subcontractors at any tier, and their respective agents and employees, and other persons performing portions of the Work for, or on behalf of, the Contractor or any of its Subcontractors or Sub-subcontractors at any tier shall keep the Project site shall keep the premises and surrounding area free from accumulation of waste materials or rubbish caused by operations under the Contract. At completion of the Work the Contractor shall remove waste materials, rubbish, the Contractor's tools, construction equipment, machinery and surplus materials from and about the Project.

§ 3.15.2 If the Contractor fails to clean up keep the Project site clean as required by the Owner or as provided in the Contract Documents, or fails to clean up the Project site upon completion of the Project, the Owner, or Construction Manager with the Owner's approval, may do so and the Owner shall be entitled to reimbursement for all costs and expenses for clean-up from the Contractor.

§ 3.15.3 Any areas and/or concurrently occupied space both occupied by the Owner and used in the progress of the Work, both within the limits of the construction site and the adjacent areas leading to it shall be maintained, opened to travel and kept in a clean condition. Failure by the Contractor to maintain said areas will result in the Owner's cleaning of same, at the expense of the Contractor for all costs and expenses for clean-up from the Contractor.

§ 3.15.4 Unless the Contract Documents require a higher standard, the Contractor shall leave all Work installed or modified under the Agreement and all existing materials and surfaces affected by the Work and each area of the Project Site clean to the satisfaction of the Owner. This shall include at a minimum: complete dusting, sweeping, vacuuming, mopping, polishing, and other activities as necessary to remove all dust, dirt and other construction residues, and removal of all tools and equipment, construction debris, rubbish, and surplus materials.

§ 3.15.5 Immediately before turning any portion of the Project over to the Owner, the Contractor shall have all glass cleaned by professional window washers. Care shall be taken not to scratch any glass. Acid or other cleaning material which will injure or mar the surface or adjacent Work will not be allowed. Any damage resulting from glass cleaning shall be corrected by the Contractor, including the furnishing of new glass of same character and quality or the replacement of other Work damaged or disturbed.

§ 3.16 Access to Work

The Contractor shall provide the Owner, Construction Manager and Architect access to the Work in preparation and progress wherever located.

§ 3.17 Royalties, Patents and Copyrights

The Contractor shall pay all royalties and license fees. The Contractor shall defend suits or claims for infringement of copyrights and patent rights and shall indemnify and hold harmless the Owner and Owner's Representative, Construction Manager and Architect harmless from any and all cost, damage and loss on account thereof, including, but not limited to, actual attorneys' fees, but shall not be responsible for such defense or loss when a particular design, process or product of a particular manufacturer or manufacturers is required by the Contract Documents or where the copyright violations are contained in Drawings, Specifications or other documents prepared by the Owner, Architect, or Construction Manager. However, if the Contractor has reason to believe that the required design, process or product is an infringement of a copyright or a patent, the Contractor shall be responsible for such loss

unless such information is promptly furnished to the Architect through the Construction Manager. The review by the Owner or Architect of any method of construction, invention, appliance, process, article, device or materials of any kind shall be for its adequacy in the Work and shall not be an approval for the use thereof by the Contractor in violation of any patent or other rights of any third person.

§ 3.18 Indemnification

§ 3.18.1 To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Owner, Construction Manager, Architect, Construction Manager's and Architect's consultants, and agents and employees of any of them from and against claims, damages, losses and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work, provided that such claim, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself) but only to the extent caused by the negligent acts or omissions of the Contractor, a Subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss or expense is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge or reduce other rights or obligations of indemnity that would otherwise exist as to a party or person described in this Section 3.18. The Contractor shall indemnify, defend and hold harmless the Owner, its Board of Education, its Board Members, in their official and individual capacities, its administrators, employees, agents, contractors, successors and assignees (collectively "Indemnitees"), from and against any and all claims, counter claims, suits, debts, demands, actions, judgments, liens, costs, expenses, damages, injuries and liabilities, including actual attorney's fees and actual expert witness fees arising out of or in connection with Contractor's performance of the Work pursuant to the Contract and/or from Contractor's violation of any of the terms of the Contract, including, but not limited to: (i) the negligent acts or willful misconduct of the Contractor, its officers, directors, employees Subcontractors, Sub-subcontractors at any tier, and their respective agents and employees, and other persons performing portions of the Work for, or on behalf of, the Contractor; (ii) any breach of the terms of the Contract by the Contractor, its officers, directors, employees, Subcontractors, Sub-subcontractors at any tier, and their respective agents and employees, and other persons performing portions of the Work for, or on behalf of, the Contractor; (iii) any violation or breach of any Applicable Law and/or licensing and permitting requirements applicable to providing the Work; or (iv) any breach of any representation or warranty by the Contractor, its officers, directors, employees, Subcontractors, Sub-subcontractors at any tier, and their respective agents and employees, and other persons performing portions of the Work for, or on behalf of, the Contractor under this Contract. The Contractor shall notify School District by certified mail, return receipt requested, immediately upon actual knowledge of any claim, suit, action, or proceeding for which the Owner may be entitled to indemnification under the Contract. This paragraph shall survive the expiration or earlier termination of the Contract.

§ 3.18.2 In claims against any person or entity indemnified under this Section 3.18 by an employee of the Contractor, a Subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, the indemnification obligation under Section 3.18 shall not be limited by a limitation on amount or type of damages, compensation or benefits payable by or for the Contractor or a Subcontractor under workers' compensation acts, disability benefit acts or other employee benefit acts. In addition to and not in limitation of the Contractor's other indemnity obligations, the Contractor hereby accepts and assumes exclusive liability for and shall indemnify, protect and save harmless the Owner, and Owner's Representative, Construction Manager and Architect from and against the payment of the following:

All contributions, taxes or premiums (including interest and penalties thereon) which may be payable under the unemployment insurance law of any state, the federal Social Security Act, federal, state, county and/or municipal tax withholding laws, or any other law, measured upon the payroll of or required to be withheld from employees by whomsoever employed, engaged in the Work to be performed and furnished under the Contract;

All sales, use, personal property and other taxes (including interest and penalties thereon) required by any federal, state, county, municipal or other law to be paid or collected by the Contractor or any of its Subcontractors or vendors or any other person or persons acting for, through or under it or any of them, by reason of the performance of the Work or the acquisition, ownership, furnishing, or use of any materials, equipment, supplies, labor, services or other items for or in connection with the Work; and

All pension, welfare, vacation, annuity and other benefit contributions payable under or in connection with respect to all persons by whomsoever employed, engaged in the Work to be performed and furnished under the Contract.

The Contractor shall indemnify, defend and hold the Owner harmless from any claim, damage, loss or expense, including but not limited to actual attorney fees, incurred by the Owner related to any Hazardous Material or waste, toxic substance, pollution or contamination brought into the Project site or caused by the Contractor or used, handled, transported, stored, removed, remediated, disturbed or dispersed of by Contractor.

§ 3.19 Record Documents

§ 3.19.1 The Contractor shall maintain at the Project site on a current basis for review by the Owner, the Architect, the Construction Manager, and all members of the Construction Team, the Record Documents, which include: a record copy of all logs, reports, Contract Documents, and Record Drawings, in good order and marked to record all changes made during construction; all approved Shop Drawings, Product Data, Samples, and other submittals; applicable handbooks; maintenance and operating manuals and instructions; and other related documents and revisions which arise out of the Contract Documents or the Work. As part of the Record Documents, the Contractor shall maintain records of principal building layout lines, elevations of the bottoms of footings, project floor levels and key site elevations certified by a qualified surveyor. The Contractor shall at all times make all records (excluding internal memoranda or reports, privileged communications and documents with incidental references to the Work, or documents which discuss multiple projects) available to the Owner, the Owner's Representative, Construction Manager and the Architect, and, at the completion of the Work, shall deliver all such Record Documents to the Owner neatly organized, bound and indexed. The Contractor shall monitor preparation of as-built Drawings by Subcontractors on a monthly basis and shall take corrective action as appropriate when as-builts are not being properly updated. The Contractor shall be permitted to retain a copy of the Record Documents for its own use after the Work is completed and, in any event, the Owner shall continue to provide access to the Record Documents, for the Contractor to inspect and copy.

§ 3.19.2 The Record Drawings shall be prepared and updated during the prosecution of the Work. The prints for Record Drawing use will be a set of blackline prints provided by the Construction Manager or Architect to the Contractor at the start of construction. The Contractor shall maintain said set in good condition and shall use colored pencils or other methods reasonably acceptable to the Owner to markup said set with "record information" in a legible manner to show: (1) deviations from the Drawings made during construction; (2) details in the Work not previously shows; (3) changes to existing conditions or existing conditions found to differ from those shown on any existing drawings; (4) the actual installed position of equipment, piping, conduits, light switches, electric fixtures, circuiting, ducts, dampers, access panels, control valves, drains, openings and stub-outs; and (5) such other information as the Owner may reasonably request.

§ 3.19.3 The Contractor shall keep note of all the deviations and discrepancies in the underground, concealed conditions and other items of construction and the Work on field Drawings. At the completion of the Project the Contractor's notes on the record field Drawings shall be neatly transcribed onto a clean set of Drawings furnished by the Construction Manager and Architect. The Contractor shall submit the final Record Drawings to the Construction Manager and Architect for review.

§ 3.19.4 During construction, the Contractor shall maintain on the Project site, a separate, clean set of Drawings for the sole purpose of recording changes and actual 'as installed' information. This set shall be accessible for inspection by the Owner, Construction Manager and the Architect at all times. The Contractor shall bring this set of Drawings to the scheduled construction progress meetings. The Contractor shall record all information as the Work progresses, clearly and neatly, in color and maintain it on a current basis as directed by the Owner and submit these Drawings to the Owner within thirty (30) days after Substantial Completion. As a general guide, the type of information to be recorded includes, but is not limited to: (1) revisions made except minor or non-critical dimensional changes, (2) omissions, including Work omitted by Change Order or accepted alternates, (3) exact dimensioned locations of concealed lines, (4) locations of all control devices, (5) any additions to Work, (6) changes in significant details, (7) and any other information of a similar nature.

§ 3.19.5 Upon substantial completion of the Project, the Contractor shall submit to the Owner the Contractor's mechanical and electrical coordination Record Drawings prepared during construction by the Contractor. Examples of such drawings include sheet metal ductwork drawings, piping drawings, fire protection piping drawings, electrical raceway drawings, and the like. When the Contractor produces drawings by computer aided drafting, the Contractor shall also submit their coordination drawings on electronic data files compatible with AutoCAD computer software. All such documents shall contain the Owner's Project Number for identification purposes.

§ 3.20 Warranties and Manuals

§ 3.20 Unless the Contract Documents require otherwise, the Contractor shall bind and turn over to the Owner two (2) sets of manufacturers' warranties and operating and/or maintenance manuals, instructions, or schedules for all equipment and special materials requiring such. Such binders will clearly categorize and index each piece of equipment and material included, and shall be clearly marked noting "Project Specific" equipment, model numbers, and other applicable information. Such manuals will be collected and organized by the Contractor and submitted to the Owner at one time, prior to the issuance of the certificate of substantial completion.

ARTICLE 4 ARCHITECT AND CONSTRUCTION MANAGER

§ 4.1 General

§ 4.1.1 The ~~Owner shall retain an a~~Architect ~~is the person~~ lawfully licensed to practice architecture or an entity lawfully practicing architecture in the jurisdiction where the Project is located. That person or entity is identified as the Architect in the Agreement and is referred to throughout the Contract Documents as if singular in number. ~~The term "Architect," "Architect/Engineer," "Engineer," or "Design Professional" as used herein means the Architect or the Architect's authorized representative.~~

§ 4.1.2 ~~The Owner shall retain a c~~Construction mManager ~~is the person~~ lawfully licensed to practice construction management or an entity lawfully practicing construction management in the jurisdiction where the Project is located. That person or entity is identified as the Construction Manager in the Agreement and is referred to throughout the Contract Documents as if singular in number.

§ 4.1.3 Duties, responsibilities and limitations of authority of the Construction Manager and Architect as set forth in the Contract Documents shall not be restricted, modified or extended without ~~the prior~~ written consent of the Owner; ~~and the~~ Construction Manager; ~~or~~ Architect ~~respectively and Contractor~~. Consent shall not be unreasonably withheld.

§ 4.1.4 If the employment of the Construction Manager or Architect is terminated, the Owner shall employ a successor construction manager or architect ~~as to whom the Contractor has no reasonable objection and whose status under the Contract Documents shall be that of the Construction Manager or Architect, respectively.~~

§ 4.2 Administration of the Contract

§ 4.2.1 The Construction Manager and Architect will provide administration of the Contract as described in the Contract Documents and will be the Owner's representatives during construction until the date the Architect issues the final Certificate for Payment ~~and, the Owner's and the Certificate for Payment is accepted by the Owner, during the correction period~~. The Construction Manager and Architect will have authority to act on behalf of the Owner only to the extent provided in the Contract Documents.

§ 4.2.2 The Architect will visit the site ~~as construction requires at intervals appropriate to the stage of construction~~, or as otherwise agreed ~~to by with~~ the Owner ~~or required by Applicable Law~~, to become generally familiar with the progress and quality of the portion of the Work completed, and to determine in general if the Work observed is being performed in a manner indicating that the Work, when fully completed, will be in accordance with the Contract Documents. However, the Architect will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. On the basis of the site visits, the Architect will keep the Owner reasonably informed about the progress and quality of the portion of the Work completed, and report to the Owner and Construction Manager (1) known deviations from the Contract Documents and from the most recent Project schedule prepared by the Construction Manager, and (2) defects and deficiencies observed in the Work.

§ 4.2.3 The Construction Manager shall provide a staffing plan to include one or more representatives who shall be in attendance at the Project site whenever the Work is being performed. The Construction Manager will determine in general if the Work observed is being performed in accordance with the Contract Documents, will keep the Owner reasonably informed of the progress of the Work, and will report to the Owner and Architect (1) known deviations from the Contract Documents and the most recent Project schedule, and (2) defects and deficiencies observed in the Work.

§ 4.2.4 The Construction Manager will schedule and coordinate the activities of the Contractor and other Multiple Prime Contractors in accordance with the latest approved Project schedule.

§ 4.2.5 The Construction Manager, except to the extent required by Section 4.2.4, and Architect will not have control over, or charge of, construction means, methods, techniques, sequences or procedures, or for the safety precautions and programs in connection with the Work, since these are solely the Contractor's rights and responsibilities under the Contract Documents, except as provided in Section 3.3.1, and neither will be responsible for the Contractor's failure to perform the Work in accordance with the requirements of the Contract Documents. Neither the Construction Manager nor the Architect will have control over or charge of or be responsible for acts or omissions of the Contractor, Subcontractors, or their agents or employees, or of any other persons or entities performing portions of the Work. The Construction Manager will schedule and coordinate the work of all Contractors on the Project, including the Contractors' use of the Project site. The Construction Manager will keep the Contractors informed of the Project Construction Schedule to enable the Contractors to plan and perform the Work in a timely manner.

§ 4.2.6 Communications Facilitating Contract Administration. Except as otherwise provided in the Contract Documents or when direct communications have been specially authorized, the Owner and Contractor shall endeavor to communicate with each other through the Construction Manager, and shall contemporaneously provide the same communications to the Architect about matters arising out of or relating to the Contract Documents. Communications by and with the Architect's consultants shall be through the Architect. Communications by and with Subcontractors and material suppliers shall be through the Contractor. Communications by and with other Multiple Prime Contractors shall be through the Construction Manager and shall be contemporaneously provided to the Architect if those communications are about matters arising out of or related to the Contract Documents. Communications by and with the Owner's own forces shall be through the Owner.

§ 4.2.7 The Construction Manager and Architect will review and certify all Applications for Payment by the Contractor, in accordance with the provisions of Article 9.

§ 4.2.8 The Architect and Construction Manager have authority to reject Work that does not conform to the Contract Documents and will notify each other about the rejection. The Construction Manager shall determine in general whether the Work of the Contractor is being performed in accordance with the requirements of the Contract Documents and notify the Owner, Contractor and Architect of defects and deficiencies in the Work. Whenever the Construction Manager considers it necessary or advisable, the Construction Manager will have authority to require additional inspection or testing of the Work in accordance with Sections 13.5.2 and 13.5.3, upon written authorization of the Owner, whether or not such Work is fabricated, installed or completed. The foregoing authority of the Construction Manager will be subject to the provisions of Sections 4.2.18 through 4.2.20 inclusive, with respect to interpretations ~~and decisions~~ of the Architect. However, neither the Architect's nor the Construction Manager's authority to act under this Section 4.2.8 nor a decision made by either of them in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the Architect or the Construction Manager to the Contractor, Subcontractors, material and equipment suppliers, their agents or employees, or other persons performing any of the Work.

§ 4.2.9 The Construction Manager will receive and promptly review for conformance with the submittal requirements of the Contract Documents, all submittals from the Contractor such as Shop Drawings, Product Data and Samples. Where there are Multiple Prime Contractors, the Construction Manager will also check and coordinate the information contained within each submittal received from Contractor and other Multiple Prime Contractors, and transmit to the Architect those recommended for approval. By submitting Shop Drawings, Product Data, Samples and similar submittals, the Construction Manager represents to the Owner and Architect that the Construction Manager has reviewed and recommended them for approval. The Construction Manager's actions will be taken in accordance with the Project submittal schedule approved by the Architect or, in the absence of an approved Project submittal schedule, with reasonable promptness while allowing sufficient time to permit adequate review by the Architect.

§ 4.2.10 The Architect will review and approve or take other appropriate action upon the Contractor's submittals such as Shop Drawings, Product Data and Samples, but only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. The Architect's action will be taken in accordance with the submittal schedule approved by the Architect or, in the absence of an approved submittal schedule, with reasonable promptness while allowing sufficient time in the Architect's professional judgment to permit adequate review. Upon the Architect's completed review, the Architect shall transmit its submittal review to the Construction Manager.

§ 4.2.11 Review of the Contractor's submittals by the Construction Manager and Architect is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, all of which remain the responsibility of the Contractor as required by the Contract Documents. The Construction Manager and Architect's review of the Contractor's submittals shall not relieve the Contractor of the obligations under Sections 3.3, 3.5 and 3.12. The Construction Manager and Architect's review shall not constitute approval of safety precautions or, unless otherwise specifically stated by the Construction Manager and Architect, of any construction means, methods, techniques, sequences or procedures. The Architect's approval of a specific item shall not indicate approval of an assembly of which the item is a component. However, should the Construction Manager or Architect discover during the course of such review any inaccuracies, incompleteness, or other irregularities, they shall immediately notify the Owner of the same to determine an appropriate corrective course of action or notify the Contractor of the same to correct the irregularities.

§ 4.2.12 The Construction Manager will ~~prepare~~ assist the Architect in the preparation of Change Orders and Construction Change Directives.

§ 4.2.13 The Construction Manager and the Architect will take appropriate action on Change Orders or Construction Change Directives in accordance with Article 7 and the Architect will have authority to order minor changes in the Work as provided in Section 7.4. The Architect, in consultation with the Construction Manager, will investigate and make determinations and recommendations regarding concealed and unknown conditions as provided in Section 3.7.4.

§ 4.2.14 ~~Utilizing the documents provided by the Contractor, the~~ The Construction Manager will maintain at the Project site for the Owner one copy of all Contract Documents, approved Shop Drawings, Product Data, Samples and similar required submittals, in good order and marked currently to record all changes and selections made during construction. These will be available to the Architect and the Contractor, and will be delivered to the Owner in good condition and reasonably organized upon completion of the Project.

§ 4.2.15 The Construction Manager will assist the Architect in conducting inspections to determine the dates of Substantial Completion and the date of final completion; issue Certificates of Substantial Completion in conjunction with the Architect pursuant to Section 9.8; and receive and forward to the Owner written warranties and related documents required by the Contract and assembled by the Contractor pursuant to Section 9.10. The Construction Manager will forward to the Architect a final Application and Certificate for Payment or final Project Application and Project Certificate for Payment upon the Contractor's compliance with the requirements of the Contract Documents.

§ 4.2.16 If the Owner and Architect agree, the Architect will provide one or more project representatives to assist in carrying out the Architect's responsibilities at the Project site. The duties, responsibilities and limitations of authority of such project representatives shall be as set forth in an exhibit to be incorporated in the Contract Documents.

§ 4.2.17 The Architect will interpret ~~and decide~~ matters concerning performance under, and requirements of the Contract Documents on written request of the ~~Construction Manager, Owner or Contractor~~ through the Construction Manager. The Architect's response to such requests will be made in writing within any time limits agreed upon or otherwise with reasonable promptness. The Contractor shall reimburse Owner for all costs and expenses for the Architect's time to interpret and decide matters it deems clear and unambiguous.

§ 4.2.18 Interpretations ~~and decisions~~ of the Architect will be consistent with the intent of and reasonably inferable from the Contract Documents and will be in writing or in the form of drawings. When making such interpretations ~~and decisions~~, the Architect will endeavor to secure faithful performance by ~~both Owner and the~~ Contractor, will not show partiality ~~to either~~ and will not be liable for results of interpretations ~~or decisions so~~ rendered in good faith and without negligence. The Contractor shall, and shall cause all Subcontractors, Sub-subcontractors at any tier, and their respective agents and employees, and other persons performing portions of the Work for, or on behalf of, the Contractor to comply with an interpretation and decision of the Architect.

§ 4.2.19 The ~~Architect's decisions~~ Owner's interpretations on matters relating to aesthetic effect will be final if consistent with the intent expressed in the Contract Documents.

§ 4.2.20 The Construction Manager will receive and review requests for information from the Contractor, and forward each request for information to the Architect, with the Construction Manager's recommendation. The Architect will review and respond in writing to the Construction Manager to requests for information about the Contract Documents. The Construction Manager's recommendation and the Architect's response to each request will be made in writing within any time limits agreed upon or otherwise with reasonable promptness given the particular circumstances. If appropriate, the Architect will prepare and issue supplemental Drawings and Specifications in response to the requests for information.

ARTICLE 5 SUBCONTRACTORS

§ 5.1 Definitions

§ 5.1.1 A Subcontractor is a person or entity who has a direct contract with the Contractor to perform a portion of the Work at the Project site. The term "Subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Subcontractor or an authorized representative of the Subcontractor. The term "Subcontractor" does not include other Multiple Prime Contractors or subcontractors of other Multiple Prime Contractors. The term "Subcontractor" shall also include material and equipment suppliers. Each and every subcontract shall be understood to have the Owner as a third party beneficiary and the Owner shall enjoy all third party beneficiary rights permitted by law.

§ 5.1.2 A Sub-subcontractor is a person or entity who has a direct or indirect contract with a Subcontractor to perform a portion of the Work at the site. The term "Sub-subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Sub-subcontractor or an authorized representative of the Sub-subcontractor.

§ 5.2 Award of Subcontracts and Other Contracts for Portions of the Work

§ 5.2.1 Unless otherwise stated in the Contract Documents or the bidding requirements, the Contractor, as soon as practicable after award of the Contract, shall furnish in writing to the Construction Manager for review by the Owner, Construction Manager and Architect the names of persons or entities (including those who are to furnish supplies, materials or equipment, including those fabricated to a special design) proposed for each principal portion of the Work. The Construction Manager ~~will~~ may reply within 14 days to the Contractor in writing stating (1) whether the Owner, the Construction Manager or the Architect has reasonable objection to any such proposed person or entity or, (2) that the Construction Manager, Architect or Owner requires additional time for review. ~~Failure of the Construction Manager, Owner, or Architect to reply within the 14-day period shall constitute notice of no reasonable objection. All contractual agreements with additional persons or entities serving as a Subcontractor or Sub-subcontractor shall expressly identify the Owner as a third-party beneficiary, and the Owner shall enjoy all third-party beneficiary rights not prohibited by law.~~

§ 5.2.2 The Contractor shall not contract with a proposed person or entity to whom the Owner, Construction Manager or Architect has made reasonable and timely objection. The Contractor shall not be required to contract with anyone to whom the Contractor has made reasonable objection.

§ 5.2.3 If the Owner, Construction Manager or Architect has reasonable objection to a person or entity proposed by the Contractor, the Contractor shall propose another to whom the Owner, Construction Manager or Architect has no reasonable objection. If the proposed but rejected Subcontractor was reasonably capable of performing the Work, the Contract Sum and Contract Time shall be increased or decreased by the difference, if any, occasioned by such change, and an appropriate Change Order shall be issued before commencement of the substitute Subcontractor's Work. However, no increase in the Contract Sum or Contract Time shall be allowed for such change unless the Contractor has acted promptly and responsively in submitting names as required.

§ 5.2.4 The Contractor shall not substitute a Subcontractor, person or entity previously selected if the Owner, Construction Manager or Architect makes reasonable objection to such substitution. The Contractor shall notify the Owner, the Architect and the Construction Manager of any proposed Subcontractor or Sub-subcontractor substitution a minimum of 10 days prior to such proposed change.

§ 5.3 Subcontractual Relations

By appropriate agreement, written where legally required for validity, the Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor by terms of the Contract Documents, and to assume toward the Contractor all the obligations and responsibilities, including responsibility for safety of the Subcontractor's Work, which the Contractor, by these Documents, assumes toward the Owner, Construction Manager and Architect. Each subcontract agreement shall preserve and protect the rights of the Owner, Construction Manager and Architect under the Contract Documents with respect to the Work to be performed by the Subcontractor so that subcontracting thereof will not prejudice such rights, and shall allow to the Subcontractor, unless specifically provided otherwise in the subcontract agreement, the benefit of all rights, remedies and redress against the Contractor that the Contractor, by the Contract Documents, has against the Owner. Where appropriate, the Contractor shall require each Subcontractor to enter into similar agreements with Sub-subcontractors. The Contractor shall make available to each proposed Subcontractor, prior to the execution of the subcontract agreement, copies of the Contract Documents to which the Subcontractor will be bound, and, upon written request of the Subcontractor, identify to the Subcontractor terms and conditions of the proposed subcontract agreement that may be at variance with the Contract Documents. Subcontractors will similarly make copies of applicable portions of such documents available to their respective proposed Sub-subcontractors.

§ 5.3.1 By appropriate agreement, written where legally required for validity, the Contractor shall require each Subcontractor and Sub-subcontractor, to the extent of the Work to be performed by the Subcontractor or Sub-subcontractor, to be bound to the Contractor by terms of the Contract Documents, and to assume toward the Contractor all the obligations and responsibilities, including responsibility for safety of the Subcontractor's and Sub-subcontractor's Work, which the Contractor, by these Documents, assumes toward the Owner, Construction Manager and Architect. Each subcontract agreement shall preserve and protect the rights of the Owner, Construction Manager and Architect under the Contract Documents with respect to the Work to be performed by the Subcontractor or Sub-subcontractor so that subcontracting thereof will not prejudice such rights, and shall allow the Subcontractor or Sub-subcontractor, unless specifically provided otherwise in the subcontract agreement, the benefit of all rights, remedies and redress against the Contractor that the Contractor, by the Contract Documents, has against the Owner. Where appropriate, the Contractor shall require each Subcontractor to enter into similar agreements with Sub-subcontractors. The Contractor shall make available to each proposed Subcontractor, prior to the execution of the subcontract agreement, copies of the Contract Documents to which the Subcontractor will be bound, and, upon written request of the Subcontractor, identify to the Subcontractor terms and conditions of the proposed subcontract agreement that may be at variance with the Contract Documents. Subcontractors will similarly make copies of applicable portions of such documents available to their respective proposed Sub-subcontractors.

§ 5.3.1.1 Work performed for the Contractor by a Subcontractor shall be performed pursuant to a written subcontract, which shall (in addition to the requirements of Sections 5.3 and 5.4) contain provisions that:

- .1 Requires that such portion of the Work be performed in accordance with the requirements of the Contract Documents;
- .2 Requires timely submission of Subcontractor's applications for payment and ancillary materials in order to enable the Contractor to apply for payment in accordance with the provisions of Article 9;
- .3 Waives all rights the contracting parties may have against one another or that the Subcontractor may have against the Owner for damages caused by fire or other perils covered by the property insurance described in Article 11;
- .4 Recognizes the rights of the Owner pursuant to the Contingent Assignment of Subcontracts contained in these General Conditions and require the Subcontractor (upon notice by the Owner that the Owner has terminated the Contract with the Contractor pursuant to the terms of Article 14, and that the Owner has elected to retain the Subcontractor pursuant to the terms of its Subcontract with the Contractor) to complete the unperformed obligations under such Subcontract and, if requested by the Owner, to enter into an appropriate agreement evidencing the fact that the Subcontractor is bound to the Owner under its Subcontract in the manner in which it had been bound to the Contractor;
- .5 Requires the Subcontractor performing labor at the Project site to carry and maintain the insurance described in Article 11, unless otherwise approved by the Owner, and to deliver certificates of insurance to the Contractor prior to commencement of its portion of the Work;
- .6 Includes the following sentence: "Owner is an intended third-party beneficiary of this Subcontract.";
- .7 Requires each Subcontractor to make all claims for changes or extensions of time to the Contractor strictly (not substantially) in the manner provided in the Contract;
- .8 Limits claims and damages in the manner provided in the Contract;
- .9 Are in no way inconsistent with any provision of the Contract; and

- .10 Requires the Subcontractor to indemnify the Owner the same extent required under Sections 3.6, 3.17, 3.18, 8.4.2, 9.3.3.1, 9.3.3.2, 9.10.2, 9.10.4, 10.1.1, 10.3.3, 10.3.4, 10.3.8 and Article 11.

Sub-subcontracts and supply contracts shall be subject to identical conditions, except: (1) suppliers that are not performing any Work on the Project site are not subject to the insurance requirements described in Article 11; and (2) Subcontractors and Sub-subcontractors may satisfy the insurance requirements described in Article 11 by being named as an additional insured under the Contractor's insurance policies or, in the case of a Sub-subcontractor, by being named as an additional insured under a Subcontractor's insurance policies.

§ 5.3.1.2 Upon request, the Contractor shall deliver a copy of any Subcontract, Sub-subcontract or Supply Contract to the Owner.

§ 5.3.2 Coordination of Subcontractors

§ 5.3.2.1 The Contractor shall provide supervisory, administrative, management, inspection and related services as required to properly coordinate, schedule and sequence the Work of the Subcontractors with each other (to avoid both supplantation and omission of Work) and with the activities and responsibilities of the Contractor, the Owner, the Construction Manager and the Architect to complete the Work in accordance with the requirements of the Contract Documents with respect to cost, time and quality and to ensure that the other goals of the Work are otherwise met or exceeded.

§ 5.3.2.2 The Contractor shall schedule and conduct with the Subcontractors and Sub-subcontractors construction progress and any other meetings deemed necessary to discuss such matters as procedures, progress, problems, safety, inspections, sequencing, and scheduling, and shall prepare and promptly distribute minutes. Construction progress meetings will be conducted by the Contractor weekly unless otherwise directed by the Owner and attended by all Subcontractors and Sub-subcontractors whose Work has not been completed. Executive level progress meetings will be held on a monthly basis. All progress meetings minutes shall be provided to the Owner by the Contractor within five (5) days after the meeting and distributed to all attendees promptly after they have been approved by the Owner. The Owner will act promptly in providing its approval.

§ 5.3.2.3 Schedule of Subcontractors' Work. The Contractor shall require each Subcontractor to agree to be contractually bound to the requirements of the Construction Schedule. The Contractor shall require each Subcontractor to agree to cooperate with the Contractor in developing a detailed schedule applicable to its portion of the Work within forty-five (45) days after award of contract unless otherwise specified. The Contractor shall assist in the development of all Subcontractor schedules and shall prepare such schedules if any Subcontractor fails to do so. The Contractor shall require all Subcontractors to meet as often as necessary with the Contractor to complete their detailed schedules. However, the Construction Schedule will take precedence over any schedules prepared by Subcontractors with respect to time of completion for each bid package. If any such schedule indicates that additional time or effort will be required to maintain these schedules, the Contractor, Subcontractor shall agree to work additional time, including weekends if necessary, or to add manpower, all at no extra cost to the Owner. The Contractor will require all their Subcontractors to include the requirements in Sections 5.3.2.3 and 5.3.2.4 in their sub-subcontractor contracts.

§ 5.3.2.4 Subcontractors' Performance. The Contractor shall ensure satisfactory and timely (with reference to both Milestone and Substantial Completion Dates) performance from each of the Subcontractors. The Contractor shall take appropriate measures when any Subcontractor is not performing its obligations satisfactorily.

§ 5.3.2.5 Payments to Subcontractors. Upon award of the Subcontract, the Contractor shall have each Subcontractor prepare and submit a schedule of values allocating that portion of the Cost of the Work attributable to its Subcontract to the various portions of the Work. Each schedule of values shall be prepared in a form and substance acceptable to the Contractor (which form shall previously have been approved by the Owner) and supported by such data as may be necessary to substantiate its accuracy. The Contractor shall develop and implement procedures for the review and processing of applications by Subcontractors for progress and final payments. Payment packages shall include, but shall not be limited to, each of the following documents: schedule of values, sworn statements, and appropriate forms of full or partial construction lien waivers or other similar waivers and releases of claims.

§ 5.3.2.6 Safety Programs. The Contractor shall provide a general review of safety programs developed by each of the Subcontractors, including a verification that each Subcontractor has submitted its report of the recommended safety

precautions and programs, as required by the Contract Documents. If the Contractor observes a safety violation, the Contractor shall require a Subcontractor to correct it. After written notification to the Subcontractor to correct the safety violation, if the Subcontractor does not correct the problem in a timely fashion, the Contractor shall cause the Work to be corrected by other means. The performance of such services by the Contractor shall not relieve the Subcontractors of their responsibilities for performance of the Work and for the safety of persons and property, and for compliance with all federal, state and local statute, rules, regulations and orders applicable to the conduct of the Work. The Contractor shall conduct regular safety meetings with Subcontractors' superintendents to ensure the Subcontractors' compliance with federal, state or local statutes, rules, and regulations relating to the Workers' safety or any other aspect of the Work.

§ 5.3.2.7 Work. The Contractor shall determine in general that the Work of each Subcontractor is being performed in accordance with the requirements of the Contract Documents, and shall guard the Owner against defects and deficiencies in the Work. As appropriate, the Contractor shall require special inspection or testing, or make recommendations to the Architect regarding special inspection or testing, of Work not in accordance with the provisions of the Contract Documents whether or not such Work has been then fabricated, installed or completed, and shall reject Work which does not conform to the requirements of the Contract Documents. The Contractor shall coordinate any inspections which may be required by any governmental agencies.

§ 5.3.2.8 Interpretation. The Contractor shall consult with the Architect and the Owner if any Subcontractor requests interpretations of the meaning and intent of any of the Contract Documents, and shall assist in the resolution of questions, which may arise.

§ 5.3.2.9 Insurance Certificates. The Contractor shall receive certificates of insurance from the Subcontractors, and shall review such certificates for compliance with the requirements of the Contract Documents, and shall forward the original certificates to the Owner. No member of the Construction Team shall be permitted to commence any portion of the Work or have a presence at the Project Site without complying with all insurance requirements of the Contract Documents. The Contractor shall monitor the same to ensure the certificates of insurance remain current, and shall advise the Subcontractors of the impending expiration of their respective certificates, but the failure of Contractor to give such advice shall not, as between the Contractor and any of the Subcontractors, excuse the obligation of the Subcontractors to maintain current, unexpired certificates.

§ 5.3.2.10 System Readiness. The Contractor shall, in the company of the Architect and the Owner's maintenance personnel, observe the Subcontractors' evaluation of utilities, operational systems and equipment for readiness, and shall assist in their initial start-up and testing.

§ 5.4 Contingent Assignment of Subcontracts

§ 5.4.1 Each subcontract agreement for a portion of the Work is assigned by the Contractor to the Owner, provided that

- .1 assignment is effective only after termination of the Contract by the Owner for cause pursuant to Section 14.2 and only for those subcontract agreements that the Owner accepts by notifying the Subcontractor and Contractor in writing; and
- .2 assignment is subject to the prior rights of the surety, if any, obligated under bond relating to the Contract.

When the Owner accepts the assignment of a subcontract agreement, the Owner assumes the Contractor's rights and obligations under the subcontract.

§ 5.4.2 Upon such assignment, if the Work has been suspended for more than 30 days, the Subcontractor's compensation ~~shall be equitably adjusted for increases in cost resulting from the suspension~~ may be equitably adjusted as negotiated by the parties.

§ 5.4.3 Upon such assignment to the Owner under this Section 5.4, the Owner may further assign the subcontract to a successor Contractor or other entity. ~~If the Owner assigns the subcontract to a successor Contractor or other entity, the Owner shall nevertheless remain legally responsible for all of the successor Contractor's obligations under the subcontract.~~

§ 5.5 Contractor and Subcontractors' Warranty Acknowledgment. The Contractor shall execute and deliver to

the Owner, and shall cause anyone giving warranties that is contractually bound to the Contractor to execute and deliver to the Owner, the following Warranty Acknowledgment before a Certificate of Final Completion is issued:

Warranty Acknowledgment

(Name of Subcontractor) ("Contractor") warrants that all of its Work complies with the requirements of the Contract Documents. If, within two (2) years after the date of Substantial Completion of the Work or designated portion of the Work, any of Contractor's Work is found to be not in accordance with the requirements of the Contract Documents, Contractor shall correct the Work at its sole expense promptly after receipt of written notice from the Owner. This two (2) year period shall be extended (i) with respect to portions of Work first performed after Substantial Completion by the period of time between Substantial Completion and the actual performance of Contractor's Work, and (ii) with respect to warranty work for an additional two (2) year period following each correction. This obligation shall survive acceptance of the Work and termination of our Contract.

This warranty shall be in addition to the terms of any other warranty or longer period of obligation specified in the Contract Documents, any applicable special warranty required by the Contract Documents, or the terms of any general warranty and is not in lieu of any of them. This warranty shall not be construed to establish a period of limitation with respect to other obligations which Contractor might have under the Contract Documents and has no relationship to the time within which the obligation to comply with the Contract Documents may be sought to be enforced or to the time which any proceeding may be commenced.

ARTICLE 6 CONSTRUCTION BY OWNER OR BY OTHER CONTRACTORS

§ 6.1 Owner's Right to Perform Construction with Own Forces and to Award Other Contracts

§ 6.1.1 The Owner reserves the right, but assumes no obligation, to perform construction or operations related to the Project with the Owner's own forces, which include persons or entities under separate contracts not administered by the Construction Manager, and to award other contracts in connection with other portions of the Project or other construction or operations on the Project site under Conditions of the Contract identical or substantially similar to these including those portions related to insurance ~~and waiver of subrogation. If the Contractor claims that delay or additional cost is involved because of such action by the Owner, the Contractor shall make such Claim as provided in Article 15.~~ The Contractor shall be responsible for coordinating the Work with the work of other Contractors, including the Owner's own forces or separate contractors, so as to complete the Work in accordance with the Project time schedule.

§ 6.1.2 When the Owner performs construction or operations with the Owner's own forces including persons or entities under separate contracts not administered by the Construction Manager, the Owner shall provide for coordination of such forces with the Work of the Contractor, who shall cooperate with them.

§ 6.1.3 ~~Unless otherwise provided in the Contract Documents, when the Owner performs construction or operations related to the Project with the Owner's own forces, the Owner shall be deemed to be subject to the same obligations and to have the same rights that apply to the Contractor under the Conditions of the Contract, including, without excluding others, those stated in Article 3, this Article 6, and Articles 10, 11 and 12.~~

§ 6.2 Mutual Responsibility

§ 6.2.1 The Contractor shall afford the Owner's own forces, Construction Manager and other Multiple Prime Contractors reasonable opportunity for introduction and storage of their materials and equipment and performance of their activities, and shall connect and coordinate the Contractor's construction and operations with theirs as required by the Contract Documents.

§ 6.2.2 If part of the Contractor's Work depends for proper execution or results upon construction or operations by the Owner's own forces or other Multiple Prime Contractors, the Contractor shall, prior to proceeding with that portion of the Work, promptly report to the Construction Manager and Architect apparent discrepancies or defects in such other construction that would render it unsuitable for such proper execution and results. Failure of the Contractor so to report shall constitute an acknowledgment that the Owner's own forces or other Multiple Prime Contractors' completed or partially completed construction is fit and proper to receive the Contractor's Work, except as to defects not then reasonably discoverable.

§ 6.2.3 The Contractor shall reimburse the Owner for costs the Owner incurs, including costs that are payable to a separate contractor or to other Multiple Prime Contractors because of the Contractor's delays, improperly timed activities or defective construction. ~~The Owner shall be responsible to the Contractor for costs the Contractor incurs because of delays, improperly timed activities, damage to the Work or defective construction by the Owner's own forces or other Multiple Prime Contractors.~~

§ 6.2.4 The Contractor shall promptly remedy damage the Contractor ~~wrongfully~~ causes to completed or partially completed construction or to property of the Owner, separate contractors, or other Multiple Prime Contractors as provided in Section 10.2.5.

§ 6.2.5 The Owner and other Multiple Prime Contractors shall have the same responsibilities for cutting and patching as are described for the Contractor in Section 3.14.

§ 6.3 Owner's Right to Clean Up

If a dispute arises among the Contractor, other Multiple Prime Contractors and the Owner as to the responsibility under their respective contracts for maintaining the premises and surrounding area free from waste materials and rubbish, the Owner may clean up and ~~the Construction Manager, with notice to the Architect, will allocate the cost among those responsible. The Owner's right to clean up shall in no event be deemed a duty, and should the Owner choose not to pursue this remedy, the Contractor necessitating such action shall remain fully responsible for the same.~~

ARTICLE 7 CHANGES IN THE WORK

§ 7.1 General

§ 7.1.1 Changes in the Work may be accomplished after execution of the Contract, and without invalidating the Contract, only by Change Order, Construction Change Directive, written contract amendment or order for a minor change in the Work, subject to the limitations stated in this Article 7 and elsewhere in the Contract Documents.

§ 7.1.2 A Change Order shall be based upon agreement among the Owner, Construction Manager, Architect and Contractor; a Construction Change Directive requires agreement by the Owner, Construction Manager and Architect and may or may not be agreed to by the Contractor; an order for a minor change in the Work may be issued by the Architect alonedwith the Owner's prior written approval.

§ 7.1.3 Changes in the Work shall be performed under applicable provisions of the Contract Documents, and the Contractor shall proceed promptly, unless otherwise provided in the Change Order, Construction Change Directive or order for a minor change in the Work.

§ 7.1.4 There shall be no changes on the Contract Sum as a result of a Change Order unless the Change Order is in writing and issued prior to effectuating the Work under the Change Order. If notice of any extra Work or change in the Work affecting the general scope of the Work or the provisions of the Contract Documents is required by the provisions of any bond, to be given to any surety issuing such bonds, the giving of any such notice shall be the Contractor's sole responsibility. In any event, in computing any increase in the Contract Sum, fees allowable for overhead and profit shall not exceed the following percentages: 10% for materials purchased and for Work completed by a Contractor's own forces; and 5% for Work completed by a Subcontractor.

§ 7.2 Change Orders

§ 7.2.1 A Change Order is a written instrument prepared by the Construction Manager and signed by the Owner, Construction Manager, Architect and Contractor, stating their agreement upon all of the following:

- .1 The change in the Work;
- .2 The amount of the adjustment, if any, in the Contract Sum; and
- .3 The extent of the adjustment, if any, in the Contract Time.

§ 7.3 Construction Change Directives

§ 7.3.1 A Construction Change Directive is a written order prepared by the ~~Architect~~Construction Manager and signed by the Owner, Construction Manager and Architect, directing a change in the Work prior to agreement on adjustment, if any, in the Contract Sum or Contract Time, or both. The Owner may by Construction Change Directive, without invalidating the Contract, order changes in the Work within the general scope of the Contract

consisting of additions, deletions or other revisions, the Contract Sum and Contract Time being adjusted accordingly.

§ 7.3.2 A Construction Change Directive shall be used in the absence of total agreement on the terms of a Change Order.

§ 7.3.3 If the Construction Change Directive provides for an adjustment to the Contract Sum, the adjustment shall be based on one or more of the following methods:

- .1 Mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation;
- .2 Unit prices stated in the Contract Documents or subsequently agreed upon;
- .3 Cost to be determined in a manner agreed upon by the parties and a mutually acceptable fixed or percentage fee; or
- .4 As provided in Section 7.3.7.

However, the Contract Time shall be adjusted only if the Contractor demonstrates to the Owner that the changes in the Work required by the Construction Change Directive adversely affect the critical path of the Work.

§ 7.3.4 If unit prices are stated in the Contract Documents or subsequently agreed upon, and if quantities originally contemplated are materially changed in a proposed Change Order or Construction Change Directive so that application of such unit prices to quantities of Work proposed will cause substantial inequity to the Owner or Contractor, the applicable unit prices shall be equitably adjusted, unless the Contractor provided such unit prices as a part of a competitive bid.

§ 7.3.5 Upon receipt of a Construction Change Directive, the Contractor shall promptly proceed with the change in the Work involved and advise the Construction Manager and Architect of the Contractor's agreement or disagreement with the method, if any, provided in the Construction Change Directive for determining the proposed adjustment in the Contract Sum or Contract Time. Contractor agreements to a Construction Change Directive shall require a follow-up writing or signature as contemplated in Section 7.3.6.

§ 7.3.6 A Construction Change Directive signed by the Contractor indicates the Contractor's agreement therewith, including adjustment in Contract Sum and Contract Time or the method for determining them. Such agreement shall be effective immediately and shall be recorded as a Change Order.

§ 7.3.7 If the Contractor does not respond promptly or disagrees with the method for adjustment in the Contract Sum, the Construction Manager shall determine, with the Owner's approval, the method and the adjustment on the basis of reasonable expenditures and savings of those performing the Work attributable to the change, including, in case of an increase in the Contract Sum, an reasonable amount allowance for overhead and profit as set forth in the Agreement, or if no such amount is set forth in the Agreement, a reasonable amount but not to exceed five percent (5%) on changes in the Work performed by a Subcontractor and ten percent (10%) for changes in the Work performed by the Contractor. In such case, and also under Section 7.3.3.3, the Contractor shall keep and present, in such form as the Construction Manager may prescribe, an itemized accounting together with appropriate supporting data. Unless otherwise provided in the Contract Documents, costs for the purposes of this Section 7.3.7 shall be limited to the following:

- .1 Actual ~~C~~costs of labor, including social security, ~~old age and~~ unemployment insurance, fringe benefits required by agreement or custom, and workers compensation insurance;
- .2 Actual ~~C~~costs of materials, supplies and equipment, including cost of transportation, whether incorporated or consumed;
- .3 Rental costs of machinery and equipment, exclusive of hand tools, whether rented from the Contractor or others; and
- .4 Actual ~~C~~costs of premiums for all bonds and insurance, permit fees, and sales, use or similar taxes related to the Work; ~~and~~
- .5 ~~Additional costs of supervision and field office personnel directly attributable to the change.~~

§ 7.3.8 The amount of credit to be allowed by the Contractor to the Owner for a deletion or change that results in a net decrease in the Contract Sum shall be actual net cost as confirmed by the Construction Manager and Architect.

When both additions and credits covering related Work or substitutions are involved in a change, the allowance for overhead and profit shall be figured on the basis of net increase, if any, with respect to that change.

§ 7.3.9 Pending final determination of the total cost of a Construction Change Directive to the Owner, the Contractor may request payment for undisputed Work completed under the Construction Change Directive in Applications for Payment. For those undisputed portions, the Construction Manager and Architect will make an interim determination for purposes of monthly certification for payment for those costs and certify for payment the amount that the Construction Manager and Architect determine to be reasonably justified. The interim determination of cost, if agreed to by the Owner in writing, shall adjust the Contract Sum on the same basis as a Change Order, subject to the right of either party the Contractor to disagree and assert a Claim in accordance with Article 15.

§ 7.3.10 When the Owner and Contractor agree in writing with a determination made by the Construction Manager and Architect concerning the adjustments in the Contract Sum and Contract Time, or otherwise reach agreement upon the adjustments in writing, such agreement shall be effective immediately and the Construction Manager shall prepare a Change Order. Change Orders may be issued for all or any part of a Construction Change Directive.

§ 7.3.11 In no event shall the Contractor be entitled to receive, and the Contractor hereby waives the right to receive any payment or any extension of time for additional or changed work, whether partially or fully completed or simply proposed, unless such additional work is authorized by a written Change Order or Construction Change Directive signed by the Owner, nor shall the Contractor be obligated to proceed with any such Work. Only the Owner shall have the right to issue a written Change Order or Constructive Change Directive to the Contractor authorizing an addition, deletion or other revision in the scope of the Work and/or an adjustment in the Contract Sum or the Construction Schedule.

§ 7.4 Minor Changes in the Work

The Architect, with the Owner's approval, has authority to order minor changes in the Work not involving adjustment in the Contract Sum or extension of the Contract Time and not inconsistent with the intent of the Contract Documents. Such changes will be effected by written order issued through the Construction Manager and shall be binding on the Owner and Contractor. The Construction Manager or Architect shall not, without written approval of Owner, order changes in the Work under this Section 7.4 that (1) are inconsistent with the intent of the Contract Documents; (2) render the Drawings and Specifications not in material conformity with the Work; or (3) materially affect the quality, utility or general aesthetics of the Work or any component, or result in the use of materials or equipment which are not equivalent to or better than the materials and equipment set forth in the Drawings and Specifications prior to such change.

§ 7.5 Contractor Change Requests

In addition to the Contractor's remedies under Article 8 in the case of delays (which shall be governed solely by Article 8 and to which this Section 7.5 shall not apply), if the Contractor believes any act, error or omission of the Owner or persons for whom Owner is responsible, including but not limited to the Architect and Owner's separate contractors, constitutes a change in the Work entitling it to additional compensation, it shall within twenty-one (21) days after the date the Contractor discovers, or should with the exercise of appropriate diligence have discovered, the pertinent act, error or omission of the Owner (provided that the necessity of extra cost and/or time is already determinable, even if such extra cost and/or time has not yet been incurred), submit a Contractor Change Order Request stating the amount of the additional compensation to which it is entitled and justifying the request. The Contractor shall submit such additional information as may reasonably be required by the Owner to evaluate the Contractor Change Order Request. The Owner shall evaluate the request within ten (10) days and advise the Contractor within such ten (10) day period whether to grant, grant in part, or deny the Contractor Change Order Request. Any additional compensation granted shall be recorded in the form of a Change Order. If the Contractor disagrees with the Owner's decision, the Contractor shall pursue the remedies it has under Article 15. Failure of the Contractor to timely submit a Contractor Change Order Request strictly (not substantially) in accordance with the requirements of this Section 7.5 shall constitute a waiver of and shall forever bar any recovery arising out of the pertinent act, error or omission of the Owner, even if the Owner was not prejudiced thereby."

ARTICLE 8 TIME

§ 8.1 Definitions

§ 8.1.1 Unless otherwise provided, Contract Time is the period of time, including authorized adjustments, allotted in the Contract Documents for Substantial Completion of the Work.

§ 8.1.2 The date of commencement of the Work is the date established in the Agreement.

§ 8.1.3 The date of Substantial Completion is the date certified by the Architect in accordance with Section 9.8.

§ 8.1.4 The term “day” as used in the Contract Documents shall mean calendar day unless otherwise specifically defined.

§ 8.2 Progress and Completion

§ 8.2.1 Time limits stated in the Contract Documents are of the essence of the Contract. By executing the Agreement the Contractor confirms that the ~~Contract~~Construction Time is a reasonable period for obtaining all supplies, materials, tools and equipment necessary to perform the Work and for properly performing the Work.

§ 8.2.2 The Contractor shall not knowingly, except by agreement or instruction of the Owner in writing, prematurely commence operations on the Project site or elsewhere prior to the effective date of insurance required by Article 11, or delivery of the performance and payment bonds required by law, to be furnished by the Contractor and Owner. The date of commencement of the Work shall not be changed by the effective date of such insurance.

§ 8.2.3 The Contractor shall see to the diligent, expeditious performance of the Work, with adequate resources so that all the Work will be completed within the Contract Time. The Contractor shall require overtime, multiple shifts and any other action necessary to complete of the Work within the Contract Time, all without additional cost to the Owner except as otherwise specifically provided in Section 8.4 in a Change Order or Construction Change Directive. The Contractor shall proceed expeditiously with adequate forces and shall achieve Substantial Completion within the Contract Time. All Work shall be completed in sufficient time to allow for clean-up and preparation for Owner move-in prior to the date of Substantial Completion.

§ 8.2.4 Without altering the applicability and obligations of Section 8.2.3, the Contractor shall prosecute the Work undertaken in a prompt and diligent manner wherever such Work, or any part of it, becomes available, or at such other times as the Owner and/or Construction Manager may direct so as to promote the general progress of the entire construction. The Contractor shall not, by delay or otherwise, interfere with or hinder the Work of any other contractor, the Owner, Construction Manager or the Architect. Any supplies, materials, tools and/or equipment that are to be furnished by the Contractor hereunder shall be furnished in sufficient time to enable the Contractor to perform and complete its Work within the time or times provided for herein. If the Contractor, through its negligence or failure, including the negligence or failure of its Subcontractors, Sub-subcontractors or suppliers, fails to furnish the necessary labor and/or supplies, materials, tools and/or equipment to meet construction needs in accordance with the established Construction Schedule, then it shall increase its forces or work such overtime as may be required, at its own expense, to bring its part of the Work up to the proper schedule. In the event the Contractor fails to take such action necessary to bring its part of the Work up to schedule within twenty-four hours of receiving notice from the Owner or Construction Manager, then the Owner, at its sole option, may supplement the Contractor's forces, materials and/or equipment or remove the Contractor from the Project, and the Owner may complete part or all of the remainder of the Contractor's Work, either utilizing in the Owner's sole discretion its own forces, new contractors chosen by the Owner or any Subcontractor, Sub-subcontractor or supplier of the Contractor, which may include fixed price supplemental work time and materials supplemental work, or any combination thereof, which in Owner's sole discretion will most quickly and completely cure the failure of the Contractor. The Contractor shall be responsible for any and all costs of performing or completing the Work that are incurred by the Owner or any Contractor, Subcontractor, Sub-subcontractor, supplier, or other entity on the Owner's behalf. The Contractor shall pay the Owner for such costs within ten (10) days of the date of invoice. If not paid within ten (10) days, the amount will be withheld from the Contractor and paid to the Owner from the next payment due the Contractor under the Agreement. Exercise of such rights shall in no way limit or jeopardize the Owner's right to any other remedy, including but not limited to a claim against the Performance Bond of the Contractor.

§ 8.3 Delays and Extensions of Time

§ 8.3.1 Except as provided in this Section 8.3, the Contractor shall be fully responsible for the timely completion of the Work in accordance with the Construction Schedule. The Contractor shall cause all members of the Construction Team to meet all Milestone Dates in the Construction Schedule. The Contractor agrees to use its best efforts to avoid the occurrence of any cause for delay, to avoid any extension of performance dates, and to mitigate the effect of any delay that does occur. The Contract Time will be extended only under the exact circumstances

described in this Section 8.3 and then if and only if the Contractor complies strictly (not substantially) with the requirements of this Section 8.3. Provided the Contractor submits a written request for an extension not more than fourteen days after the occurrence that gives rise to the delay, If the Contractor is delayed at any time in the commencement or progress of the Work by an act or neglect of the Owner, Owner's own forces, Construction Manager, Architect, any of the other Multiple Prime Contractors or an employee of any of them, or by changes ordered in the Work, or by labor disputes, fire, unusual delay in deliveries, unavoidable casualties or other causes beyond the Contractor's control; or by delay authorized by the Owner pending mediation and arbitration, litigation, mediation, or arbitration, as applicable, or by other causes that the Architect, based on the recommendation of the Construction Manager, determines may justify delay, then the Contract Time may shall be extended by Change Order. Failure of the Contractor to submit a timely request for an extension shall irrevocably waive the Contractor's right to such an extension of time. If the contract time is subject to extension pursuant to this subparagraph, such extension shall be the exclusive remedy of the Contractor and the Contractor shall not be entitled to recover damages from the Owner, for such reasonable time as the Architect may determine.

§ 8.3.2 Claims relating to time shall be made in accordance with applicable provisions of Article 15. The Contractor shall use its best efforts to mitigate the effects of any delay.

§ 8.3.3 This Section 8.3 does not preclude recovery of damages for delay by either party under other provisions of the Contract Documents. The Contractor acknowledges that the Construction Manager's Schedule for the Work may change during the duration of the Project and that fact was taken into account by the Contractor when it agreed to the Contract Sum and entered into this Contract under the terms and conditions set forth herein. As a result, the Contractor shall not be entitled to any additional monies as a result of such schedule changes.

§ 8.3.4 Notices in connection with delays shall be made by the Contractor to the Owner in accordance with this Section. The Contractor shall use its best efforts to provide verbal notice to the Owner within twenty-four (24) hours after the commencement of a delay. It must in any event do so as soon as possible and not later than three (3) days after commencement of the delay. Any verbal notice given shall be confirmed in writing within four (4) days. If the Contractor fails to deliver verbal notice within three (3) days after the commencement of a delay, it shall not be entitled to any relief pertaining to the period of time before it gave verbal notice. If the Contractor fails to confirm any verbal notice within four (4) days after the verbal notice was given, it shall not be entitled to any relief for the period of time beginning after the passage of such four (4) days and ending when the confirmation is actually received by the Owner. And, if the Contractor fails to provide verbal notice within ten (10) days after the commencement of a delay or to confirm any verbal notice within ten (10) days after the verbal notice was given, the Contractor shall be barred from seeking any relief whatsoever relating to the delay. Immediately following the commencement of any such cause for delay, representatives of the Contractor and Owner shall confer for the purpose of determining the probable length of the delay and a course of action which would end or eliminate the occurrence or event which is causing delay. The Contractor shall also within twenty-one (21) days after the cessation of such delay notify the Owner of the date of such cessation and the total amount of delay, if any, in performance dates which the Contractor is entitled to claim by reason of any such occurrence. If the Contractor intends to request an extension of time for any delay, it shall accompany the notice of cessation of delay with a Change Order Request stating the specific extension or adjustment requested and justifying the reason for the request. The Contractor shall thereafter submit such additional information as may be required by the Owner to evaluate the Change Order Request. The Owner shall decide whether to grant, grant in part or deny the Change Order Request. Any extension of time or adjustment granted shall be memorialized in the form of a Change Order. Acceptance and execution of any such Change Order by the parties shall constitute an accord and satisfaction that forever bars any and all claims arising out of or in connection with the delay giving rise to the Change Order. If the Contractor disagrees with the Owner's decision, it may pursue the remedies available to it under Article 15. However, failure of the Contractor to timely assert any alleged delay or claim for extension strictly (not substantially) in accordance with the provisions of this Section 8.3.2 shall constitute a waiver of and shall forever bar that claim, even if the Owner was not prejudiced thereby.

§ 8.4 DELAY DAMAGE CLAIMS

§ 8.4.1 If the Contractor fails to complete its Work on time resulting in loss or damage to the Owner, whether or not liquidated damages are called for in the Contract Documents, the Owner shall be entitled to recover any damages caused by the Contractor's breach, including overhead, profit, extended general conditions, actual attorney fees, etc.

§ 8.4.2 In the event the Contractor is delayed or hindered in the commencement or progress of the Work by the Work or lack of Work of another contractor or subcontractor on the Project and the Contractor claims monetary damages as a direct and proximate consequence thereof (including, but not limited to, extended general conditions, overhead, profit, overtime, interest, supervision or other costs or profits whatsoever), then the Contractor shall not assert such claims against the Architect, Construction Manager or Owner and, as to the Architect, Construction Manager and Owner, the Contractor's claims of delay damages are hereby waived. The Contractor's sole and exclusive remedy regarding such claims for such delay damages shall be to pursue such claims directly against any contractor(s) and/or subcontractors on the job which caused the delay, and with regard to such claims asserted against the Contractor by any other contractor(s) and/or subcontractors, the Contractor hereby waives the defense of absence of contractual privity and hereby assumes liability to other contractor(s) and/or subcontractors arising out of the Contractor's actions or inactions resulting in such delay and claim. To the extent a claim for monetary damages is asserted against the Owner for delay of the Contractor, the Contractor shall indemnify, defend and hold harmless the Owner from all damages, costs and fees, including actual attorney fees, arising out of such a claim.

§ 8.4.3 In the event of Owner delay, the Contractor shall be entitled to an equitable adjustment in the Contract Sum. This adjustment shall be based solely upon and limited to additional actual out-of-pocket expenses to the extent they are incurred directly as a result of the Owner delay. Without limiting the generality of the foregoing, such out-of-pocket expenses shall be calculated on an "actual cost" basis, and shall exclude home office expense and other overhead, profit and the value of lost opportunities. However, the Contractor shall use its best efforts to avoid or reduce delay damages to any member of the Construction Team caused by Owner delay. The Owner and Contractor shall mutually agree to the amount of this equitable adjustment in writing.

ARTICLE 9 PAYMENTS AND COMPLETION

§ 9.1 Contract Sum

The Contract Sum is stated in the Agreement and, including authorized adjustments, is the total amount payable by the Owner to the Contractor for performance of the Work under the Contract Documents.

§ 9.2 Schedule of Values

Where the Contract is based on a Stipulated Sum or Guaranteed Maximum Price, the Contractor shall submit to the Construction Manager, before the first Application for Payment, Before the first Application for Payment, the Contractor shall submit a schedule of values allocating the entire Contract Sum to the various portions of the Work and prepared in such form and supported by such data to substantiate its accuracy as the Construction Manager and Architect may require. This schedule, unless objected to by the Construction Manager or Architect, shall be used as a basis for reviewing the Contractor's Applications for Payment. In the event there is one Contractor, the Construction Manager shall forward to the Architect the Contractor's schedule of values. If there are Multiple Prime Contractors responsible for performing different portions of the Project, the Construction Manager shall forward the Multiple Prime Contractors' schedules of values only if requested by the Architect.

§ 9.2.1 Unless otherwise provided in the Contract Document, the Contractor shall include a separate allocation for Project closeout in the schedule of values. The following scheduled values are not part of retainage, and shall be listed on the Application for Payment:

<u>As-Built (Record Drawings) Documents</u>	<u>1.0% of Contract Sum</u>
<u>Training and O&M Manuals</u>	<u>1.0% of Contract Sum</u>
<u>Attic Stock Materials</u>	<u>0.5% of Contract Sum</u>
<u>Punch-list Completion</u>	<u>2.0% of Contract Sum</u>
<u>Warranty and Guaranty Documents</u>	<u>0.5% of Contract Sum</u>

§ 9.3 Applications for Payment

§ 9.3.1 At least fifteen days before the date established for each progress payment, the Contractor shall submit to the Construction Manager an itemized Application for Payment prepared in accordance with the schedule of values, if required under Section 9.2, for completed portions of the Work. Such application shall be notarized, if required, and supported by such data substantiating the Contractor's right to payment as the Owner, Construction Manager or Architect may require, such as copies of requisitions from Subcontractors and material suppliers, and shall reflect retainage if provided for in the Contract Documents. The Construction Manager and Contractor must provide copies of the insurance certificates, bonds, and the same for all of the Contractors and Subcontractors prior to commencing Work and prior to submitting the first Application for Payment.

§ 9.3.1.1 As provided in Section 7.3.9, such applications may include requests for payment on account of changes in the Work that have been properly authorized by Construction Change Directives, or by interim determinations of the Construction Manager and Architect, but not yet included in Change Orders. A request for payment of sums related to Work regarding Construction Change Directives shall, unless qualified in writing at the time of request, constitute full and complete consent to the Construction Change Directive(s) and to the issuance of a Change Order.

§ 9.3.1.2 Applications for Payment shall not include requests for payment for portions of the Work for which the Contractor does not intend to pay a Subcontractor or material supplier unless such Work has been performed by others whom the Contractor intends to pay.

§ 9.3.1.3 The Contractor shall submit with each monthly Application for Payment (1) an Affidavit that payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the previous application was submitted and the Owner might in any way be responsible have been paid or otherwise satisfied, (2) a release or waiver of liens arising out of the Contract from each Contractor and/or Subcontractor, materialmen, supplier and laborer or the Contractor addressing all previous Applications for Payment submitted for the Project, and (3) if applicable, an updated Schedule of Values incorporating changes in the Work.

§ 9.3.2 Unless otherwise provided in the Contract Documents, payments shall be made on account of materials and equipment delivered and suitably stored at the Project site for subsequent incorporation in the Work. If approved in advance by the Owner, payment may similarly be made for materials and equipment suitably stored off the Project site at a location agreed upon in writing. Payment for materials and equipment stored on or off the Project site shall be conditioned upon compliance by the Contractor with procedures satisfactory to the Owner to establish the Owner's title to such materials and equipment or otherwise protect the Owner's interest, and shall include the costs of applicable insurance, storage and transportation to the Project site for such materials and equipment stored off the site. Payment to Contractor for materials stored off site is discouraged. When circumstances indicate that the Owner's best interest is served by off-site storage, the Contractor shall make written request to the Owner and Construction Manager for approval to include such material costs in his next progress payment. The Contractor's request shall include the following information:

- .1 A list of the fabricated materials consigned to the Project site (which shall be clearly identified, giving the place of storage, together with copies of invoices and reasons why materials cannot be delivered to the site.
- .2 Certification that items have been tagged for delivery to the Project and that they will not be used for another purpose.
- .3 A letter from the Contractor's Surety indicating agreement to the arrangements and that payment to the Contractor shall not relieve either party of their responsibility to complete the Work.
- .4 Evidence of adequate insurance covering the material in storage, which shall name the Owner as additionally insured.
- .5 Costs incurred by the Owner, Construction Manager and Architect to inspect material in off-site storage shall be paid by the Contractor.
- .6 Subsequent pay requests shall itemize the materials and their cost which were approved on previous pay requests and remain in off-site storage.
- .7 When a partial payment is allowed on account of material delivered on the site of the Work or in the vicinity thereof or under possession and control of the Contractor, but not yet incorporated therein, such material shall become the property of the Owner, but if such material is stolen, destroyed or damaged by casualty before being used, the Contractor will be required to replace it at its own expense.

§ 9.3.3 The Contractor warrants that title to all Work covered by an Application for Payment will pass to the Owner no later than the time of payment. The Contractor further warrants that upon submittal of an Application for Payment all Work for which Certificates for Payment have been previously issued and payments received from the Owner shall, to the best of the Contractor's knowledge, information and belief, be free and clear of liens, claims, security interests or encumbrances in favor of the Contractor, Subcontractors, material suppliers, or other persons or entities making a claim by reason of having provided labor, materials and equipment relating to the Work.

§ 9.3.3.1 Except with respect to liens resulting from Owner's failure to make properly due payments to Contractor, the Contractor hereby expressly agrees to hold harmless, indemnify and defend the Indemnitees, at the Contractor's sole cost and expense, from and against any and all costs (including without limitation reasonable attorney fees), liabilities,

actions, lawsuits, claims or proceedings brought against Indemnitees as a result of any lien or claim of lien filed against the Work, the site of any of the Work, the Project site or any improvements thereon, payments due the Contractor or any portion of the property of any of the Indemnitees. Notwithstanding the above, Contractor acknowledges that in accordance with Applicable Laws, public property cannot be liened.

§ 9.3.3.2 In the event of any lien or claim of lien, Owner may withhold from payments otherwise due Contractor, such amounts as Owner deems suitable to protect it from the adverse effect of such lien or claim of lien. The Owner shall release any payments or portions thereof withheld due to a lien or claim of lien if the Contractor obtains security acceptable to the Owner or a lien bond which is (1) issued by a surety acceptable to the Owner, (2) in form and substance satisfactory to the Owner, and (3) in an amount not less than Two Hundred Percent (200%) of such lien or lien claim. By posting such bond or other acceptable security, however, the Contractor shall not be relieved of any responsibilities or obligations under this Section 9.3, including, without limitation, the duty to defend, hold harmless and indemnify the Indemnitees. Except with respect to liens resulting from Owner's failure to make properly due payments to Contractor, the cost of any premiums incurred in connection with such bonds and security shall be the responsibility of the Contractor and shall not cause any adjustment to the Contract Sum.

§ 9.4 Certificates for Payment

§ 9.4.1 Where there is only one Contractor, the Construction Manager will, within seven days after the Construction Manager's receipt of the Contractor's Application for Payment, review the Application, certify the amount the Construction Manager determines is due the Contractor, and forward the Contractor's Application and Certificate for Payment to the Architect. Within seven days after the Architect receives the Contractor's Application for Payment from the Construction Manager, the Architect will either issue to the Owner a Certificate for Payment, with a copy to the Construction Manager, for such amount as the Architect determines is properly due, or notify the Construction Manager and Owner in writing of the Architect's reasons for withholding certification in whole or in part as provided in Section 9.5.1. The Construction Manager will promptly forward to the Contractor the Architect's notice of withholding certification.

§ 9.4.2 Where there are Multiple Prime Contractors performing portions of the Project, the Construction Manager will, within seven days after the Construction Manager receives the Multiple Prime Contractors' Applications for Payment: (1) review the Applications and certify the amount the Construction Manager determines is due each of the Multiple Prime Contractors; (2) prepare a Summary of Contractors' Applications for Payment by combining information from each Multiple Prime Contractors' application with information from similar applications for progress payments from other Multiple Prime Contractors; (3) prepare a Project Application and Certificate for Payment; (4) certify the amount the Construction Manager determines is due all Multiple Prime Contractors; and (5) forward the Summary of Contractors' Applications for Payment and Project Application and Certificate for Payment to the Architect.

§ 9.4.3 Within seven days after the Architect receives the Project Application and Project Certificate for Payment and the Summary of Contractors' Applications for Payment from the Construction Manager, the Architect will either issue to the Owner a Project Certificate for Payment, with a copy to the Construction Manager, for such amount as the Architect determines is properly due, or notify the Construction Manager and Owner in writing of the Architect's reasons for withholding certification in whole or in part as provided in Section 9.5.1. The Construction Manager will promptly forward the Architect's notice of withholding certification to the Contractors.

§ 9.4.4 The Construction Manager's certification of an Application for Payment or, in the case of Multiple Prime Contractors, a Project Application and Certificate for Payment shall be based upon the Construction Manager's evaluation of the Work and the information provided as part of the Application for Payment. The Construction Manager's certification will constitute a representation that, to the best of the Construction Manager's knowledge, information and belief, the Work has progressed to the point indicated and the quality of the Work is in accordance with the Contract Documents. The certification will also constitute a recommendation to the Architect and Owner that the Contractor be paid the amount certified.

§ 9.4.5 The Architect's issuance of a Certificate for Payment or in the case of Multiple Prime Contractors, Project Application and Certificate for Payment, shall be based upon the Architect's evaluation of the Work, the recommendation of the Construction Manager, and information provided as part of the Application for Payment or Project Application for Payment. The Architect's certification will constitute a representation that, to the best of the Architect's knowledge, information and belief, the Work has progressed to the point indicated, that the quality of the

Work is in accordance with the Contract Documents, and that the Contractor is entitled to payment in the amount certified.

§ 9.4.6 The representations made pursuant to Sections 9.4.4 and 9.4.5 are subject to an evaluation of the Work for conformance with the Contract Documents upon Substantial Completion, to results of subsequent tests and inspections, to correction of minor deviations from the Contract Documents prior to completion and to specific qualifications expressed by the Construction Manager or Architect, in writing, together with the Certification to which the qualification pertains.

§ 9.4.7 The issuance of a separate Certificate for Payment or a Project Certificate for Payment will not be a representation that the Construction Manager or Architect has, unless otherwise required by Contract or law, (1) made exhaustive or continuous on-site inspections to check the quality or quantity of the Work, (2) reviewed the Contractor's construction means, methods, techniques, sequences or procedures, (3) reviewed copies of requisitions received from Subcontractors and material suppliers and other data requested by the Owner to substantiate the Contractor's right to payment or (4) made examination to ascertain how or for what purpose the Contractor has used money previously paid on account of the Contract Sum.

§ 9.5 Decisions to Withhold Certification

§ 9.5.1 The Construction Manager or Architect may withhold a Certificate for Payment or Project Certificate for Payment in whole or in part, to the extent reasonably necessary to protect the Owner, if in the Construction Manager's or Architect's opinion the representations to the Owner required by Section 9.4.4 and 9.4.5 cannot be made. If the Construction Manager or Architect is unable to certify payment in the amount of the Application, the Construction Manager will notify the Contractor and Owner as provided in Section 9.4.1 and 9.4.3. If the Contractor, Construction Manager and Architect cannot agree on a revised amount, the Architect will promptly issue a Certificate for Payment or a Project Certificate for Payment for the amount for which the Architect is able to make such representations to the Owner. The Construction Manager or Architect may also withhold a Certificate for Payment or, because of subsequently discovered evidence or subsequent observations, may nullify the whole or a part of a Certificate for Payment or Project Certificate for Payment previously issued, to such extent as may be necessary in the Construction Manager's or Architect's opinion to protect the Owner from loss for which the Contractor is responsible, including loss resulting from the acts and omissions described in Section 3.3.2 because of

- .1 defective Work not remedied, or the Contractor is in default of the Agreement;
- .2 third party claims filed or reasonable evidence indicating probable filing of such claims unless security acceptable to the Owner is provided by the Contractor;
- .3 failure of the Contractor to make payments properly to Subcontractors or for labor, materials or equipment;
- .4 reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum;
- .5 damage to the Owner or a separate contractor;
- .6 reasonable evidence that the Work will not be completed within the Contract Time, and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay;
or
- .7 ~~repeated~~ failure to carry out the Work in accordance with the Contract Documents;
- .8 failure to provide any documentation, Record Documents, certified weekly payroll reports, as required, etc., in a timely manner;
- .9 any failure by Contractor or a Subcontractor to fully perform any obligation under the Contract;
- .10 the Work not having progressed to the extent set forth in the Application for Payment; and
- .11 representations of the Contractor are untrue.

§ 9.5.2 When the above reasons for withholding certification are removed, certification will be made for amounts previously withheld.

§ 9.5.3 If the Architect or Construction Manager withholds certification for payment under Section 9.5.1, the Owner may, at its sole option, issue joint checks to the Contractor and to any Subcontractor or material or equipment suppliers to whom the Contractor failed to make payment for Work properly performed or material or equipment suitably delivered. If the Owner makes payments by joint check, the Owner shall notify the Architect and the Construction Manager and both will reflect such payment on the next Certificate for Payment.

§ 9.5.4 If the Contractor disputes any determination by the Owner, Architect, or Construction Manager with regard to any Certificate for Payment, the Contractor shall nevertheless continue to expeditiously perform the Work and such dispute shall provide no basis for any manner of suspension of the Contractor's performance of the Work.

§ 9.6 Progress Payments

§ 9.6.1 After the Architect has issued a Certificate for Payment or Project Certificate for Payment, the Owner shall make payment in the manner and within the time provided in the Contract Documents, and shall so notify the Construction Manager and Architect.

§ 9.6.2 The Contractor shall pay each Subcontractor, no later than seven days after receipt of payment from the Owner the amount to which the Subcontractor is entitled, reflecting percentages actually retained from payments to the Contractor on account of the Subcontractor's portion of the Work. The Contractor shall, by appropriate agreement with each Subcontractor, require each Subcontractor to make payments to Sub-subcontractors in a similar manner.

§ 9.6.3 The Construction Manager will, on request, furnish to a Subcontractor, if practicable, information regarding percentages of completion or amounts applied for by the Contractor and action taken thereon by the Owner, Construction Manager and Architect on account of portions of the Work done by such Subcontractor.

§ 9.6.4 The Owner has the right to request written evidence from the Contractor that the Contractor has properly paid Subcontractors and material and equipment suppliers amounts paid by the Owner to the Contractor for subcontracted Work. If the Contractor fails to furnish such evidence within seven days, the Owner shall have the right to contact Subcontractors to ascertain whether they have been properly paid. Neither the Owner, Construction Manager nor Architect shall have an obligation to pay or to see to the payment of money to a Subcontractor except as may otherwise be required by law.

§ 9.6.5 Contractor payments to material and equipment suppliers shall be treated in a manner similar to that provided in Sections 9.6.2, 9.6.3 and 9.6.4. The Owner may, in its sole discretion, after providing Contractor with ten (10) days prior written notice, make direct payments to the Contractor's Subcontractors, material men, laborers or claimants relating to labor or material provided to the Contractor for which the Contractor has not provided a waiver of lien, in the event the Subcontractors, material men, laborers or claimants threaten to or actually cease providing labor and/or materials for the Project such that, in the Owner's determination, progress of the Project and the Project's schedule are jeopardized. All payments made pursuant to this section shall be considered the same as if paid directly to the Contractor and shall constitute partial payment of the Contract Sum. In the event the Contractor disagrees with the amount proposed to be paid to one or more Subcontractors, material men, laborers or claimants, the Contractor shall provide a bond in the amount the Contractor believes the Owner will overpay, within ten (10) days of receipt of notice, or be barred from making any claim that the amount of the direct payment was incorrect. Payment under this provision shall not jeopardize any other remedy available to the Owner.

§ 9.6.6 A Certificate for Payment, a progress payment, or partial or entire use or occupancy of the Project by the Owner shall not constitute acceptance of Work not in accordance with the Contract Documents.

§ 9.6.7 Unless the Contractor provides the Owner with a payment bond in the full penal sum of the Contract Sum, payments received by the Contractor for Work properly performed by Subcontractors and suppliers shall be held by the Contractor for those Subcontractors or suppliers who performed Work or furnished materials, or both, under contract with the Contractor for which payment was made by the Owner. Nothing contained herein shall require money to be placed in a separate account and not commingled with money of the Contractor, shall create any fiduciary liability or tort liability on the part of the Contractor for breach of trust or shall entitle any person or entity to an award of punitive damages against the Contractor for breach of the requirements of this provision.

§ 9.6.8 Subject to applicable law, if a petition in bankruptcy or any other arrangement or proceeding regarding insolvency, assignment for the benefit of creditors, trust, chattel mortgage, or similar state or federal proceeding, whether voluntary or involuntary, shall be filed with respect to the Contractor, the Owner may withhold the final balance, or any other payments, whether or not an application for progress payment has been properly filed, until expiration of the period of any guarantees or warranties required for the Contractor, and the Owner may pay out such funds the amount necessary to satisfy any claims or costs that otherwise would have been covered by such guarantees or warranties.

§ 9.6.9 Unless otherwise provided in the Agreement or Contract Document, the Owner may retain out of each progress payment a "Retainage" equal to ten percent (10%) of that payment, excluding any portion paid for the Contractor's General Conditions costs. Retainage on all individual Subcontractors which include both labor and material shall be ten percent (10%) until the Work under the Subcontract is fifty percent (50%) completed. If the Work is progressing pursuant to the terms of the Agreement and at the Owner's sole discretion, no additional sums shall be retained. Retainage will be paid upon Final Completion and acceptance of the Work in accordance with Section 9.10. Upon mutual agreement of the Owner, the Architect and the Contractor, payment in full may be made to Subcontractors whose Work is fully completed during early stages of the Project. The Contractor acknowledges and agrees that payments by the Owner shall only be made in respect of Applications for Payments, or portions thereof, approved by the Owner. If the Contractor disputes any good faith determination by the Owner with regard to any Certificate of Payment, or amount paid by the Owner in respect thereof, the Contractor shall nevertheless expeditiously continue to prosecute the Work while such dispute is being resolved in accordance with the provisions of Article 15.

§ 9.7 Failure of Payment

If the Construction Manager and Architect do not issue a Certificate for Payment or a Project Certificate for Payment, through no fault of the Contractor and without justifiable basis under the Contract Document, within fourteen days after the Construction Manager's receipt of the Contractor's Application for Payment, or if the Owner does not pay the Contractor within seven days after the date established in the Contract Documents the amount certified by the Construction Manager and Architect or awarded by ~~binding~~ dispute resolution, then the Contractor may, upon seven-twenty-one (21) additional days' written notice to the Owner, Construction Manager and Architect, stop the Work until payment of the amount owing has been received. The Contract Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the Contractor's reasonable costs of shut-down, delay and start-up, plus interest as provided for in the Contract Documents.

§ 9.8 Substantial Completion

§ 9.8.1 Substantial Completion is the stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with the Contract Documents and when all required occupancy permits, if any, have been issued, so the Owner can occupy or utilize the Work for its intended use.

§ 9.8.2 When the Contractor considers that the Work, or a portion thereof which the Owner agrees to accept separately, is substantially complete, the Contractor shall notify the Construction Manager, and the Contractor and Construction Manager shall jointly prepare and submit to the Architect a comprehensive Punchlist of items to be completed or corrected prior to final payment. Failure to include an item on such Punchlist does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents.

§ 9.8.3 Upon receipt of the Punchlist, the Architect, assisted by the Construction Manager, will make an inspection to determine whether the Work or designated portion thereof is substantially complete. If the Architect's inspection discloses any item, whether or not included on the Punchlist, which is not sufficiently complete in accordance with the requirements of the Contract Documents so that the Owner can occupy or utilize the Work or designated portion thereof for its intended use, the Contractor shall, before issuance of the Certificate of Substantial Completion, complete or correct such item immediately upon notification by the Architect. In such case, the Contractor shall then submit a request for another inspection by the Architect, assisted by the Construction Manager, to determine Substantial Completion.

§ 9.8.4 When the Architect, assisted by the Construction Manager, determines that the Work or designated portion thereof is substantially complete, the Construction Manager will prepare, and the Construction Manager and Architect shall execute a Certificate of Substantial Completion that shall establish the date of Substantial Completion, shall establish responsibilities of the Owner and Contractor for security, maintenance, heat, utilities, damage to the Work and insurance, and shall fix the time within which the Contractor shall finish all items on the Punchlist accompanying the Certificate. Warranties required by the Contract Documents shall commence on the date of Substantial Completion final acceptance of the Work by Owner following final completion and final payment under Section 9.10 or designated portion thereof unless otherwise provided in the Certificate of Substantial Completion.

§ 9.8.5 The Certificate of Substantial Completion shall be submitted to the Owner and Contractor for their written acceptance of responsibilities assigned to them in such Certificate. Upon such acceptance and consent of surety, if any, the Owner shall make payment of retainage applying to such Work or designated portion thereof. Such payment shall be adjusted for Work that is incomplete or not in accordance with the requirements of the Contract Documents.

§ 9.8.6 Notwithstanding Sections 9.8.1 and 9.8.2, as a condition precedent to establishing the date of Substantial Completion, the Contractor shall prepare and submit to the Architect and Construction Manager a comprehensive Punchlist of items to be completed or correct (a "Punchlist"). The Contractor shall respond immediately to correct Work deficiencies and/or Punchlist items. Should the Contractor fail to make corrections in a timely fashion, but not later than thirty (30) calendar days from the date of Substantial Completion or notification of the required corrections, whichever is earlier, such Work may be corrected by the Owner at the Contractor's sole expense, and the Contract Sum may be adjusted accordingly.

§ 9.8.7 The Contractor shall promptly notify the Construction Manager, in writing, when the Work deficiencies and/or Punchlist items are completed. Upon the review of the Work by the Construction Manager after such notification by the Contractor, if Work deficiencies and/or Punchlist items shall continue to exist, the Contractor shall reimburse the Owner its cost plus twenty percent (20%) overhead and profit on any cost incurred by the Owner, including the Construction Manager's and Architect's fees for reinspections of the Work. Failure to pay such costs within ten (10) days of receipt of a demand regarding the same shall permit the Owner to pay such costs out of retainage held by the Owner on the Contractor's Contract.

§ 9.9 Partial Occupancy or Use

§ 9.9.1 The Owner may occupy or use any completed or partially completed portion of the Work at any stage when such portion is designated by separate agreement with the Contractor, provided such occupancy or use is consented to by the insurer as required under Section 11.3.1.5 and authorized by public authorities having jurisdiction over the Project. Such partial occupancy or use may commence whether or not the portion is substantially complete, provided the Owner and Contractor have accepted in writing the responsibilities assigned to each of them for payments, retainage if any, security, maintenance, heat, utilities, damage to the Work and insurance, and have agreed in writing concerning the period for correction of the Work and commencement of warranties required by the Contract Documents. When the Contractor considers a portion substantially complete, the Contractor ~~and Construction Manager shall jointly prepare and submit a list to the Architect as provided under Section 9.8.2. Consent of the Contractor to partial occupancy or use shall not be unreasonably withheld. The stage of the progress of the Work shall be determined by written agreement between the Owner and Contractor or, if no agreement is reached, by decision of the Architect after consultation with the Construction Manager shall proceed with the Work in such a manner as reasonably directed and shall cooperate with the Owner to limit interruptions.~~

§ 9.9.2 Immediately prior to such partial occupancy or use, the Owner, Construction Manager, Contractor and Architect shall jointly inspect the area to be occupied or portion of the Work to be used in order to determine and record the condition of the Work.

§ 9.9.3 Unless otherwise agreed upon, partial occupancy or use of a portion or portions of the Work shall not constitute acceptance of Work not complying with the requirements of the Contract Documents.

§ 9.9.4 Any agreement as to the acceptance of non-conforming Work not complying with the requirements of the Contract Documents, shall be in writing in the form of a Change Order, acceptable to the Owner's authorized representative and signed by all parties.

§ 9.10 Final Completion and Final Payment

§ 9.10.1 Upon completion of the Work, the Contractor shall forward to the Construction Manager a written notice that the Work is ready for final inspection and acceptance and shall also forward to the Construction Manager a final Contractor's Application for Payment. Upon receipt, the Construction Manager will evaluate the completion of Work of the Contractor and then forward the notice and Application, with the Construction Manager's recommendations, to the Architect who will promptly make such inspection. When the Architect, finds the Work acceptable under the Contract Documents and the Contract fully performed, the Construction Manager and Architect will promptly issue a final Certificate for Payment or Project Certificate for Payment stating that to the best of their knowledge, information and belief, and on the basis of their on-site visits and inspections, the Work has been completed in accordance with terms and conditions of the Contract Documents and that the entire balance found to

be due the Contractor and noted in the final Certificate is due and payable. The Construction Manager's and Architect's final Certificate for Payment or Project Certificate for Payment will constitute a further representation that conditions listed in Section 9.10.2 as precedent to the Contractor's being entitled to final payment have been fulfilled.

§ 9.10.2 Neither final payment nor any remaining retained percentage shall become due until the Contractor submits to the Architect through the Construction Manager (1) an affidavit that payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the Owner or the Owner's property might be responsible or encumbered (less amounts withheld by Owner) have been paid or otherwise satisfied, (2) a certificate evidencing that insurance required by the Contract Documents to remain in force after final payment is currently in effect and will not be canceled or allowed to expire until at least 30 days' prior written notice has been given to the Owner, (3) a written statement that the Contractor knows of no substantial reason that the insurance will not be renewable to cover the period required by the Contract Documents, (4) consent of surety, if any, to final payment and (5) an affidavit that states the Work is fully completed and performed in accordance with the Contract Documents and is satisfactory to the Architect and the Owner, (6) in the event of Contractor bankruptcy, at the Owner's option, an order entered by the court having jurisdiction of the Contractor's insolvency proceeding authorizing such payment, (7) a general release executed by the Contractor on a form provided by the Construction Manager; and (8) if required by the Owner, other data establishing payment or satisfaction of obligations, such as close out documentation, the other documentation required by the Contract Documents, receipts, releases and waivers of liens, claims, security interests or encumbrances arising out of the Contract, to the extent and in such form as may be designated by the Owner. If a Subcontractor refuses to furnish a release or waiver required by the Owner, the Contractor may furnish a bond satisfactory to the Owner to indemnify the Owner against such lien. If such lien remains unsatisfied after payments are made, the Contractor shall refund to the Owner all money that the Owner may be compelled to pay in discharging such lien, including all costs and actual ~~reasonable~~ attorneys' fees.

§ 9.10.3 If, after Substantial Completion of the Work, final completion thereof is materially delayed through no fault of the Contractor or by issuance of Change Orders affecting final completion, and the Construction Manager and Architect so confirm, the Owner shall, upon application by the Contractor and certification by the Construction Manager and Architect, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance for Work not fully completed or corrected is less than retainage stipulated in the Contract Documents, and if bonds have been furnished, the written consent of surety to payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by the Contractor to the Architect through the Construction Manager prior to certification of such payment. Such payment shall be made under terms and conditions governing final payment, except that it shall not constitute a waiver of Claims.

§ 9.10.4 The making of final payment shall constitute a waiver of Claims by the Owner except those arising from

- .1 liens, Claims, security interests or encumbrances arising out of the Contract and unsettled;
- .2 failure of the Work to comply with the requirements of the Contract Documents; ~~or~~
- .3 terms of special warranties required by the Contract Documents; ~~or~~
- .4 Owner's Claims arising after final payment;
- .5 Owner's claims for indemnification; or
- .6 Claims about which the Owner has previously given notice to the Contractor.

§ 9.10.5 Acceptance of ~~the~~ final payment by the Contractor, a Subcontractor or material supplier shall constitute a waiver of all claims by that payee except those previously made in writing and identified by that payee as unsettled at the time of final Application for Payment and specifically referenced as being an exception to the waiver contained in this Section.

§ 9.10.6 The amount of the Final Payment shall be the Contract Sum less the amount paid to date. If the aggregate of previous payments made by the Owner exceeds the amount due the Contractor, the Contractor shall immediately reimburse the difference to the Owner.

ARTICLE 10 PROTECTION OF PERSONS AND PROPERTY

§ 10.1 Safety Precautions and Programs

~~The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the performance of the Contract. The Contractor shall submit the Contractor's safety program to the~~

Construction Manager for review and coordination with the safety programs of other Contractors. The Construction Manager's responsibilities for review and coordination of safety programs shall not extend to direct control over or charge of the acts or omissions of the Contractors, Subcontractors, agents or employees of the Contractors or Subcontractors, or any other persons performing portions of the Work and not directly employed by the Construction Manager. The Contractor shall continuously maintain adequate protection of all Work from damage and shall protect the Owner's property from injury or loss. The Contractor shall repair any such damage, injury or loss at no cost to the Owner, except to the extent directly caused by agents or employees of the Owner. The Contractor shall adequately protect the Work and Owner's property as required by Applicable Law, the Contract Documents, or as otherwise required, to cause no damage to the Work and Owners' property during the execution of the Work. This requirement shall also apply to structures above and below ground as conditions of the Project site require. The Contractor shall also provide recommendations and information to the Owner regarding: (a) the assignment of responsibilities for safety precautions and programs by the Subcontractors and the Owner for the safety of members of the Construction Team, the Owner, and the general public; (b) temporary facilities; and (c) equipment, materials and services for common use of Subcontractors. The Contractor shall verify that the requirements and assignment of responsibilities are included in the proposed Contract Documents.

§ 10.1.1 The Contractor shall at all times observe and comply with all Applicable Laws which may in any manner affect the equipment and materials used in the proposed construction, those employed on the work, and the conduct of the Work. The Contractor shall hold harmless and indemnify the Owner and its Board of Education (in its individual and official capacities), employees and administrators, against any claim or liability arising from the violation of any Federal, State, local and/or municipal laws, ordinances, rules and regulations, whether the violations are by the Contractor or any Subcontractor, Sub-subcontractor or any other person employed or engaged by the Contractor or Subcontractor.

§ 10.1.2 The Contractor is solely responsible to the Owner for health and safety at the Project Site and, accordingly, shall be solely responsible for initiating, monitoring, maintaining and supervising all safety precautions and programs in connection with the performance of the Work. The foregoing does not relieve the Subcontractors of their responsibility to the Contractor for the safe performance of their Work in accordance with all Applicable Laws.

§ 10.1.3 The Contractor shall develop and implement a health and safety plan that complies with all Applicable Laws covering all activities on the Project site except those activities performed solely by the Owner. The Contractor shall provide the Owner a copy of such health and safety plan prior to commencement of Work. The Owner shall have no duty to review the plan and shall assume no duty by doing so. The plan shall be included in all bidding documents, and the requirements of the plan shall be applicable to all members of the Construction Team.

§ 10.2 Safety of Persons and Property

§ 10.2.1 The Contractor shall take reasonable precautions for safety of, and shall provide reasonable protection to prevent damage, injury or loss to

- .1 employees on the Work and other persons who may be affected thereby;
- .2 the Work and materials and equipment to be incorporated therein, whether in storage on or off the site, under care, custody or control of the Contractor or the Contractor's Subcontractors or Sub-subcontractors;
- .3 other property at the Project site or adjacent thereto, such as trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction; and
- .4 construction or operations by the Owner or other Contractors.

§ 10.2.2 The Contractor shall comply with and give notices required by ~~a~~Applicable ~~L~~aws, statutes, ordinances, codes, rules and regulations and lawful orders of public authorities bearing on safety of persons or property or their protection from damage, injury or loss.

§ 10.2.3 The Contractor shall erect and maintain, as required by existing conditions and performance of the Work, ~~Contract~~, ~~reasonable adequate~~ safeguards for safety and protection, including posting danger signs and other warnings against hazards, promulgating safety regulations and notifying owners and users of adjacent sites and utilities. The Contractor shall also be responsible for all measures necessary to protect any property adjacent to the Project site and improvements thereon. Any damage to such property or improvements shall be promptly repaired by the Contractor.

- .1 The various parts of the structure and adjoining structures that cannot be maintained in their final

positions with stability until other connecting or abutting parts or members are constructed and permanently secured shall be substantially braced and held in place. The Contractor shall protect the Project against all damage from the elements, overloading of the structure, and undermining or displacement due to conditions of the Project site or due to any other methods of construction.

- .2 The Work shall be executed in a manner which will cause as little inconvenience as possible to the Owner in the Owner's use of the property and existing facilities and structures. Where applicable the Contractor shall provide and maintain adequate, dust tight, protective coverings, enclosures and barricades about the Work and shall keep the same in repair throughout the entire Work. Enclosures of appropriate fire rated construction shall be installed by the Contractor where necessary to divide the Work area from the Owner's occupied areas.
- .3 During the prosecution of the Work, the Owner will use and occupy the buildings and site adjacent to and surrounding the Project site. At all times during the construction period, safe and convenient access shall be maintained to and from these buildings and any other portions of the site occupied by the Owner and/or Subcontractors.

§ 10.2.4 ~~No~~ When use or storage of explosives or other ~~h~~Hazardous m~~M~~aterials or equipment or unusual methods shall be allowed at the Project site without the Owner's express written consent. If the use or storage of explosives or other Hazardous Materials or equipment or unusual methods are necessary and permitted by the Owner are ~~neccessary~~ for execution of the Work, the Contractor shall exercise utmost care and carry on such activities under supervision of properly qualified personnel and shall store in compliance with all Applicable Laws. When in the course of the Work use or storage of explosives or other Hazardous Materials or equipment or unusual construction methods are necessary, the Contractor shall give the Owner reasonable advance notice.

- .1 No explosives will be permitted on the Owner's premises unless written permission is given by the Owner not less than seventy-two (72) hours in advance of the time of delivery of such explosives. All risks, regardless of the Owner's approval, associated with the storage, handling and use of explosives are solely borne by the Contractor, as are any costs associated with damages, injuries or losses arising out of the use of such explosives.
- .2 The use of disposal or flammable liquids or other combustible materials shall be handled in accordance with Applicable Laws.

§ 10.2.5 The Contractor shall promptly remedy damage and loss (other than damage or loss insured under property insurance required by the Contract Documents) to property referred to in Sections 10.2.1.2, 10.2.1.3 and 10.2.1.4 caused in whole or in part by the Contractor, a Subcontractor, a Sub-subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts they may be liable and for which the Contractor is responsible under Sections 10.2.1.2, 10.2.1.3 and 10.2.1.4, except damage or loss attributable to acts or omissions of the Owner, Construction Manager or Architect or anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable, and not attributable to the fault or negligence of the Contractor. The foregoing obligations of the Contractor are in addition to the Contractor's obligations under Section 3.18.

§ 10.2.6 The Contractor shall designate a responsible member of the Contractor's organization at the site whose duty shall be the prevention of accidents. This person shall be the Contractor's superintendent unless otherwise designated by the Contractor in writing to the Owner, Construction Manager and Architect.

§ 10.2.7 ~~The Contractor shall not permit any part of the construction or site to be loaded so as to cause damage or create an unsafe condition.~~ The Contractor shall not load or permit any part of the structure or Project site to be loaded with a weight that will endanger the structural integrity of the structure or Project site or the safety of workmen or any other persons on or about the Work. When required law or for the safety of the Work, the Contractor shall shore up, brace, underpin, and protect foundations and other portion of existing structures that are in any way affected by the Work. Before commencement of any part of the Work, the Contractor shall serve any and all notices required to be given to adjoining land and/or property owners or other parties.

§ 10.2.8 Injury or Damage to Person or Property

If either party suffers injury or damage to person or property because of an act or omission of the other party, or of others for whose acts such party is legally responsible, written notice of such injury or damage, whether or not insured, shall be given to the other party within a reasonable time not exceeding 21 days after discovery. The notice shall provide sufficient detail to enable the other party to investigate the matter. The Contractor shall take all necessary precautions for the safety of employees and visitors on the Project site and shall comply with Applicable Laws and

provisions of federal, state, and municipal safety laws and building codes to prevent accidents or injury to persons on, about or adjacent to the Project Site where the Work is being performed. The Contractor shall erect and properly maintain at all times, as required by the conditions and progress of the Work, all necessary safeguards for the protection of workers and the public. The Contractor shall post danger signs warning against the hazards created by such features of construction such as protruding nails, hoists, holes, elevator hatchways, scaffolding, window openings, stairways, falling material and other such features.

§ 10.2.9 When all or a portion of the Work is suspended for any reason, the Contractor shall be responsible for securely fastening down all coverings and protecting the Work from injury by any cause.

§ 10.2.10 The Contractor shall promptly report in writing to the Owner all accidents arising out of or in connection with the Work which cause death, personal injury, or property damage, giving full details and statements of any witnesses. In addition, if death, serious personal injuries, or serious property damages occur, the accident shall be reported immediately by telephone or messenger to the Owner. The obligations in this Section are in addition to the Contractor's reporting obligations under Applicable Laws.

§ 10.3 Hazardous Materials

§ 10.3.1 The Contractor is responsible for compliance with any requirements included in the Contract Documents regarding hazardous materials. If the Contractor encounters a hazardous material or substance not addressed in the Contract Documents and if reasonable precautions will be inadequate to prevent foreseeable bodily injury or death to persons resulting from a material or substance, including but not limited to, asbestos or polychlorinated biphenyl (PCB), encountered on the site by the Contractor, the Contractor shall, upon recognizing the condition, immediately stop Work in the affected area and report the condition to the Owner, Construction Manager and Architect in writing. The Contractor shall not, nor shall it permit any member of the Construction Team to bring on, keep, store, use, release or dispose of any Hazardous or potentially Hazardous Material on, in or about the Project Site except permitted materials and as required by Section 10.3.8., subject to the requirements of §10.3.9. If Contractor or Construction Team encounters a Hazardous or potentially Hazardous Material on, in, under or about the Project Site that is not permitted or not in compliance with Section 10.3, Contractor shall immediately stop Work in the affected area and notify the Owner, Construction Manager, and Architect, in writing.

§ 10.3.2 Upon receipt of the Contractor's written notice, the Owner shall obtain the services of a licensed laboratory to verify a presence or absence of the material or substance reported by the Contractor and, in the event such material or substance is found to be present, to cause it to be rendered harmless. Unless otherwise required by the Contract Documents, the Owner shall furnish in writing to the Contractor, Construction Manager and Architect the names and qualifications of persons or entities who are to perform tests verifying the presence or absence of such material or substance or who are to perform the task of removal or safe containment of such material or substance. The Contractor, the Construction Manager and the Architect will promptly reply to the Owner in writing stating whether or not any of them has reasonable objection to the persons or entities proposed by the Owner. If the Contractor, Construction Manager or Architect has an objection to a person or entity proposed by the Owner, the Owner shall propose another to whom the Contractor, the Construction Manager and the Architect have no reasonable objection. When the material or substance has been rendered harmless, Work in the affected area shall resume upon written agreement of the Owner and Contractor. By Change Order, the Contract Time shall be extended appropriately and the Contract Sum shall be increased in the amount of the Contractor's reasonable additional costs of shut down, delay and start-up. The Contractor shall cause the presence, use, storage and/or disposal of Permitted Materials by any member of the Construction Team to be in strict (not substantial) compliance in every respect with all Applicable Laws and shall promptly notify the Owner if any amount of Permitted Materials, Hazardous Materials or Potentially Hazardous Materials are released on the Project site at any time in a quantity that would have to be reported or remediated under any Applicable Laws.

- .1 The Contractor shall at its expense, without recovery from the Owner, under the Contract Sum, any contingency or otherwise, fully and promptly remediate each and every release of Permitted Materials and any other Hazardous Materials in full compliance with all Applicable Laws to the most stringent standards, e.g., residential, available under all Applicable Laws, and in cooperation with the Owner, except to the extent the Hazardous Materials (i) existed uncontainerized, in or under the Project Site before Work began at the Project Site and neither the Contractor nor any other member of the Construction Team released or exacerbated such pre-existing contamination after recognizing the presence and general location of such contamination, or (ii) were caused directly by the Owner, the Architect, a contractor of the Owner who is not a member of the Construction Team, or any third party. Notwithstanding the foregoing limitations, the Contractor shall be responsible if and to the extent, after

recognizing the presence and general location of Hazardous Materials that were pre-existing at the Site, or after it should have recognized such presence and general location, it exacerbates the condition or area impacted by the Hazardous Materials.

§ 10.3.3 To the fullest extent permitted by law, the Owner shall indemnify and hold harmless the Contractor, Subcontractors, Construction Manager, Architect, their consultants, and agents and employees of any of them from and against claims, damages, losses and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work in the affected area if in fact the material or substance presents the risk of bodily injury or death as described in Section 10.3.1 and has not been rendered harmless, provided that such claim, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself), except to the extent that such damage, loss or expense is due to the fault or negligence of the party seeking indemnity. The Contractor shall at its expense, without recovery from the Owner, the Contract or otherwise, be solely responsible to the Indemnitees for and shall defend, indemnify and hold harmless the Indemnitees and the Project site from and against all claims, suits, administrative proceedings, personal injury, investigations, damages, costs, fines, judgments and liabilities, including, but not limited to, attorneys' fees and costs, arising out of or in connection with the generation, release, transportation, storage, use, disposal or presence of permitted materials or Hazardous Materials at the Project site by or due to any member of the Construction Team or for any noncompliance with the Agreement. The indemnity in the previous sentence and in Section 10.3.4 does not include claims, fines, etc., to the extent they arise from (i) contamination that existed before Work began at the Project Site or (ii) contamination that was caused directly by the Owner, the Architect, a contractor of the Owner who is not a member of the Construction Team, or any third-party. In both (i) and (ii), the exclusion of Contractor obligations does not apply to circumstances in which the Contractor has exacerbated the presence of Hazardous Materials or triggered a response or removal requirement. In addition, the obligations of the paragraph include, but are not limited to, Contractor's remediation and removal of any release of Hazardous Materials that it brought to the Project Site. Contractor's obligations herein are not limited by the extent of its insurance coverage.

§ 10.3.4 The Owner shall not be responsible under this Section 10.3 for materials or substances the Contractor brings to the site unless such materials or substances are required by the Contract Documents. The Owner shall be responsible for materials or substances required by the Contract Documents, except to the extent of the Contractor's fault or negligence in the use and handling of such materials or substances. The Contractor's defense, indemnity, and hold harmless obligations shall include, but not be limited to, any and all governmentally mandated investigation, remediation, removal and/or clean-up of any such Permitted Materials or Hazardous Materials, and all related fees and costs.

§ 10.3.5 The Contractor shall indemnify the Owner for the cost and expense the Owner incurs (1) for remediation of a material or substance the Contractor brings to the site and negligently handles, or (2) where the Contractor fails to perform its obligations under Section 10.3.1, except to the extent that the cost and expense are due to the Owner's fault or negligence. If the Contractor shall receive any notice, whether oral or written, of any inquiry, test, investigation, enforcement proceeding, environmental audit or the like by or against the Contractor, any member of the Construction Team, or the Work with regard to any Hazardous Materials at or emanating from the Project site, the Contractor shall immediately notify the Owner and Architect.

§ 10.3.6 If, without negligence on the part of the Contractor, the Contractor is held liable by a government agency for the cost of remediation of a hazardous material or substance solely by reason of performing Work as required by the Contract Documents, the Owner shall indemnify the Contractor for all cost and expense thereby incurred. If any member of the Construction Team encounters on the Project Site material, which it believes is a Hazardous Material in any form (other than Permitted Materials being used in an appropriate manner or asbestos, asbestos containing materials or polychlorinated biphenyl (PCBs) which have been rendered harmless), the Contractor shall (i) immediately stop Work in the area affected, (ii) report the condition to the Owner and Architect as expeditiously as possible, and (iii) clear all persons from the area of exposure. The Work in the affected area shall not be resumed until the Hazardous Material has been removed or rendered harmless as evidenced by written agreement of the Owner and the Contractor. The term "rendered harmless" shall be interpreted to mean that the levels are less than any applicable exposure standards set forth in OSHA regulations and all Applicable Laws or the Hazardous Material is containerized for purposes of removal from the Project Site, in compliance with Applicable Laws. In no event, however, shall the Owner have any responsibility for any substance or material that is brought to the Project Site by any member of the

Construction Team. No member of the Construction Team shall bring any off-site materials or soil on the Project Site to use as fill that are not compliance with and accompanied by a Uncontaminated Soil Certification by a licensed professional engineer or geologist or, in the case of aggregate stone, a receipt from the originating quarry.

§ 10.3.7 Except as otherwise provided in the Agreement, including, but not limited to the exclusions in Section 10.3, and except to the extent covered by any insurance, the Owner, to the extent permitted by law, shall hold harmless the Contractor and Subcontractors from and against claims, damages, losses and expenses, including but not limited to attorneys' fees, arising out of or resulting from the presence of Hazardous Materials on the Project Site that pre-existed the Work.

§ 10.3.8 The Contractor shall work with asbestos or PCB or other Hazardous Material, except as provided for under the Work and in compliance with all Applicable Laws, including, but not limited to, employee protection, licensing, and training. The Contractor agrees to excavate and stockpile on site soils with levels of contamination such that it can be safely and lawfully handled without special protective equipment if the Owner so requests. In such a circumstance, the Contractor shall comply with all Applicable Laws, shall be fully responsible for any non-compliance with all Applicable Laws, and decreasing obligations otherwise stated in Section 10.3, shall indemnify, defend and hold harmless the Owner for any and all claims arising from the Contractor's or Construction Team's failure to so comply with an Applicable Law.

§ 10.3.9 The Contractor shall take care to minimize the use of any Hazardous Materials to the extent consistent with the orderly conduct of the Work. To the maximum extent practical, the Contractor shall cause Permitted Materials which contain Hazardous Materials (and any explosive materials which are not Hazardous Materials) to be stored off the Project Site and off Owner's premises. Except for Permitted Materials, all Hazardous Materials used, stored or generated at the Project Site by the Construction Team shall be used, stored, transported and disposed of in strict (not substantial) conformity with Applicable Laws and the Contractor shall maintain -- and provide promptly to Owner upon demand -- appropriate and complete documentation evidencing the Contractor's compliance with all such laws, codes, rules, regulations, guidelines and orders. The term "Permitted Materials" as used in the Contract Documents shall mean materials that are general supplies and equipment that have a hazardous or potentially hazardous nature and are or will be used for their intended purpose and which do not pose any significant threat of contamination to the Project Site or neighboring properties). The Contractor shall not permit inclusion of asbestos, polychlorinated biphenyls or urea formaldehyde in any construction materials (www.epa.gov/iaq/schooldesign/construction.html) The Contractor shall be responsible for the removal and cleanup of all Hazardous Materials and wastes brought to the Project Site or generated at the Project Site by any member of the Construction Team.

§ 10.4 Emergencies

In an emergency affecting safety of persons or property, the Contractor shall act, at the Contractor's discretion, to prevent threatened damage, injury or loss. Additional compensation or extension of time claimed by the Contractor on account of an emergency shall be determined as provided in Article 15 and Article 7.

§ 10.5 Security

§ 10.5.1 All members of the Construction Team shall cooperate with the Owner's security personnel and shall comply with all of the Owner's security requirements. Such requirements shall include, without limitation, if requested by the Owner, delivering to the Owner's security personnel, prior to the commencement of the Work on each day, a list of all personnel who will be permitted access to the Work. The foregoing, however, shall not relieve the Contractor of any obligation to provide a safe and secure workplace for all parties entering the Project site.

- .1 The Construction Manager and Contractors shall be responsible for providing Project site security to the extent necessary to safeguard the building, tools, materials, and completed Work. The Construction Manager and Contractor's written plan for Project Site security shall be submitted to the Owner for approval within twenty (20) days of the execution of the Agreement.
- .2 The entrances to the Project site will remain open during normal working hours for the use of all members of the Construction Team. Prior to and after normal working hours, all entrances and exits will be closed and secured by the Contractor. The Contractor shall provide to the Owner copies of keys (2 each) for all doors and gates secured.

§ 10.5.2 The Owner reserves the right to bar access to any individual for reasonable security reasons. Furthermore, the Owner reserves the right to limit the location of entries to the Work which may be used by members of the Construction Team.

§ 10.6 Dust; Smoke; Fume

§ 10.6.1 The Contractor shall cause each member of the Construction Team to conduct operations in such a manner, which will control blowing dust. The amount of dust resulting from the operations of each of the Construction Team shall be controlled to prevent the spread of dust to adjacent public and private properties, to avoid creation of a nuisance in the surrounding area, and to avoid violation of any Applicable Law. Temporary methods consisting of sprinkling or similar methods will be permitted to control dust. Use of water will not be permitted when it will result in, or create, hazardous or objectionable conditions such as ice, flooding and pollution. Dust control shall be performed as the Work proceeds and whenever a dust or nuisance or hazard occurs.

§ 10.6.2 Smoke pipes, exhausts and fumes from boilers, engines, or other devices, shall in all cases be extended above roofs of buildings, or a substitute arrangement made subject to approval of the Architect and the Owner.

§ 10.6.3 The Contractor shall enforce the Architect's or the Owner's instructions regarding signs, advertisements, fires and smoking. No smoking will be permitted.

§ 10.7 Fire Precautions

§ 10.7.1 All members of the Construction Team shall take all necessary precautions to guard against and eliminate all possible fire hazards and to prevent fire damage to any construction Work, building materials, equipment, temporary field offices, storage sheds, and all other property, both public and private. The members of the Construction Team shall comply with all conditions and requirements set forth herein, and shall immediately correct any hazardous conditions resulting from their operations when brought to their attention.

- .1** Materials and/or equipment stored in cardboard cartons, wood crates, or other combustible containers, shall be stored in an orderly manner and shall be readily accessible.
- .2** Before starting Work, the Contractor shall consult with the Owner and Architect regarding established rules and regulations relative to fire protection requirements and procedures governing any welding and cutting operations. The Contractor shall strictly (not substantially) conform and shall cause all members of the Construction Team to strictly (not substantially) conform with such rules and regulations in carrying out the Work. No such operations shall be carried out without proper safeguards for fire safety.
- .3** No open fires will be permitted. No tar or other melting kettles will be allowed within fifty (50) feet of any building.
- .4** All tarpaulins used during the course of the Work shall be of flameproof type and shall be secured in place against damage or flapping from wind.
- .5** All oil soaked rags, papers and other similar combustible material shall be removed from any building at the close of each day's Work, or more often if necessary, and placed in metal containers with self-closing lids.
- .6** Gasoline, benzene or like combustible material shall not be poured into sewers, manholes, or traps, but shall be containerized on-site and disposed of off-site, together with all flammable or waste material subject to spontaneous combustion, in compliance with Applicable Laws and in a manner to avoid hazard or damage to persons or property.
- .7** All heating devices in connection with temporary heating facilities shall be of the least hazardous type, shall have all proper safety provisions and shall be installed at such locations and in such manner as will minimize the hazard. Oil fired stoves, gas fired heaters and heating units shall be of types approved by Underwriters Laboratories and shall have proper safety combustion controls. Oil fired heaters shall have integral fuel tanks not to exceed fifteen (15) gallons capacity for each unit. No more than one (1) day's supply of fuel shall be permitted to each heater which are inside of any building or facility.
- .8** Temporary heating facilities shall be inspected regularly to assure that they are in a safe and proper operating condition at all times. The Contractor shall provide continuously during operation properly trained personnel for said inspections.
- .9** Temporary structures of combustible construction shall not be placed inside of any structure. Such temporary structures shall be detached at a sufficiently safe distance from any building. Totally non-combustible temporary structures may, if necessary and feasible, be located inside of the structure.
- .10** Heaters and/or stoves installed in field offices or storage structures shall have fire resistant material underneath and at all sides, partitions and walls. Pipe sleeves shall be used where stove pipes run through walls or roof.

§ 10.7.2 The Contractor shall provide necessary personnel and firefighting equipment to effectively control fires resulting from welding, flame cutting, or other operations involving the use of flame, sparks, or sparking devices.

During such operations, all highly combustible or flammable materials shall be removed from the immediate working area. If removal is impossible the same shall be protected with fire blankets or suitable non-combustible shields.

§ 10.7.3 Not more than one day's supply of flammable liquids or gases, such as oil, gasoline, solvent, propane, or roofing materials, shall be brought into any building at any one time. All flammable liquids having a flash point of 110 degrees F, or below, which must be brought into any building, shall be confined to Underwriters Laboratories labeled safety cans. The bulk supply of any flammable liquid shall be stored at a sufficiently safe distance from any building and from yard storage of building materials. Spigots on drums containing flammable liquids are prohibited on the Project site. Drums are to be equipped with approved vented pumps. The Contractor shall have a Spill Prevention, Control, and Countermeasure Plan ("SPCC"), all members of the Construction Team shall be trained with respect to the SPCC, and the SPCC shall provide for response materials to be available in all locations where Hazardous Materials that are brought to the Project Site by any member of the Construction Team are located, used, or stored.

§ 10.7.4 Only a reasonable working supply of flammable building materials shall be located inside of or on the roof of any building.

§ 10.8 Fire Protection

§ 10.8.1 The Contractor shall maintain free access to the building areas for firefighting equipment and shall at no time block off main roadways or fire aisles without providing adequate auxiliary roadways and means of entrance for firefighting equipment, including heavy fire department trucks, where applicable.

§ 10.8.2 The Contractor shall at all times cooperate with the Owner and keep the municipal fire department informed of the means of entrance and changes to roadways or fire aisles as needed to provide fire department access to or around to Project site.

§ 10.8.3 The Contractor shall, during the entire construction period and until the completion of the Work, provide and maintain all material, equipment and services necessary for an adequate fire protection system, which shall meet the approval of the Owner and/or the Architect. The system shall, at a minimum, meet the requirements set forth in the Contract Documents and of Applicable Laws. These requirements shall be augmented and/or the installations relocated, as may be necessary to meet, at all times, the demands of adequate protection in all areas and shall not be reduced prior to the completion of the Work without the written approval of the Owner and/or the Architect.

§ 10.8.4 The Contractor shall maintain during construction an appropriate number of fire extinguishers to meet Factory Mutual (FM) requirements. Fire extinguishers shall be in good working order, conveniently located, clearly visible and readily accessible for proper protection of the Work.

§ 10.8.5 Fire extinguishers shall be an approved type, equivalent to 2-1/2 gallon water pressurized, suitable for the hazards to be encountered. In areas of flammable liquid, asphalt, or electrical hazards, fire extinguishers shall be equivalent to the carbon dioxide type or dry chemical type. During freezing weather, extinguishers shall be enclosed in heated cabinets or be of an antifreeze type.

§ 10.8.6 All other parties with temporary structures on the Project site shall provide and maintain fire extinguishers in each of such structures.

ARTICLE 11 INSURANCE AND BONDS

§ 11.1 Contractor's Liability Insurance

§ 11.1.1 The Contractor shall purchase from and maintain in a company or companies lawfully authorized to do business in the jurisdiction in which the Project is located ~~such~~ and must have an A.M. Best's Rating of "A", XII or better. Such insurance as will protect the Contractor from claims set forth below which may arise out of or result from the Contractor's operations and completed operations under the Contract and for which the Contractor may be legally liable, whether such operations be by the Contractor or by a Subcontractor or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable:

- .1 Claims under workers' compensation, disability benefit and other similar employee benefit acts which are applicable to the Work to be performed;
- .2 Claims for damages because of bodily injury, occupational sickness or disease, or death of the Contractor's employees;
- .3 Claims for damages because of bodily injury, sickness or disease, or death of any person other than the Contractor's employees;
- .4 Claims for damages insured by usual personal injury liability coverage;

- .5 Claims for damages, other than to the Work itself, because of injury to or destruction of tangible property, including loss of use resulting therefrom;
- .6 Claims for damages because of bodily injury, death of a person or property damage arising out of ownership, maintenance or use of a motor vehicle; and
- .7 Claims for bodily injury or property damage arising out of completed operations; ~~and~~
- .8 Claims involving contractual liability insurance applicable to the Contractor's obligations under Section 3.18;:-
- .9 Liability insurance shall include all major divisions of coverage and be on a comprehensive basis including:
 - Premises' Operations (deleting X, C, or U exclusions);
 - Owner's and Contractor's Protective;
 - Products and Completion Operations;
 - Contractual – including specific for the Contractor's obligations under Paragraph 3.18;
 - Any auto; and
 - Broad Form Property Damage, including Completed Operations; and
- .10 All Bonds required by law, including bid bond, performance bond and payment bond.

§ 11.1.2 The insurance required by Section 11.1.1 shall be written for not less than limits of liability specified in the Contract or other Contract Documents or required by law, whichever coverage is greater. Coverages, whether written on an occurrence or claims-made basis, shall be maintained without interruption from the date of commencement of the Work until the date of final payment and termination of any coverage required to be maintained after final payment and, with respect to the Contractor's completed operations coverage, until the expiration of the period for correction of Work or for such other period for maintenance of completed operations coverage as specified in the Contract Documents.

§ 11.1.3 Certificates of insurance acceptable to the Owner shall be submitted by Contractor to the Construction Manager for transmittal to the Owner with a copy to the Architect prior to commencement of the Work and thereafter upon renewal or replacement of each required policy of insurance. These certificates and the insurance policies required by this Section 11.1 shall contain a provision that coverages afforded under the policies will not be canceled, reduced or allowed to expire until at least 30 days' prior written notice has been given to the Owner. An additional certificate evidencing continuation of liability coverage, including coverage for completed operations, shall be submitted with the final Application for Payment as required by Section 9.10.2 and thereafter upon renewal or replacement of such coverage until the expiration of the time required by Section 11.1.2. Information concerning reduction of coverage shall be furnished by the Contractor with reasonable promptness, but not less than 30 days prior to any reduction in coverage.

§ 11.1.4 The Contractor shall cause the commercial liability coverage required by the Contract Documents to include (1) the Construction Manager, the Construction Manager's consultants, the Owner, the Owner's Representative, the Architect, and the Architect's consultants as additional insureds for claims caused in whole or in part by the Contractor's negligent acts or omissions during the Contractor's operations; and (2) the Owner as an additional insured for claims caused in whole or in part by the Contractor's negligent acts or omissions during the Contractor's completed operations. Such Certificates of Insurance shall be endorsed to specifically name the additional insureds.

§ 11.2 Owner's Liability Insurance

The Owner shall be responsible for purchasing and maintaining the Owner's usual liability insurance.

§ 11.3 Property Insurance

§ 11.3.1 Unless otherwise provided, the Owner shall purchase and maintain, in a company or companies lawfully authorized to do business in the jurisdiction in which the Project is located, property insurance written on a builder's risk "all risk" or equivalent policy form in the amount of the initial Contract Sum, plus value of subsequent Contract modifications and cost of materials supplied or installed by others, comprising total value for the entire Project at the site on a replacement cost basis without optional deductibles. Such property insurance shall be maintained, unless otherwise provided in the Contract Documents or otherwise agreed in writing by all persons and entities who are beneficiaries of such insurance, until final payment has been made as provided in Section 9.10 or until no person or entity other than the Owner has an insurable interest in the property required by this Section 11.3 to be covered, whichever is later. This insurance shall include interests of the Owner, the Contractor, Subcontractors and Sub-subcontractors in the Project.

§ 11.3.1.1 Property insurance shall be on an “all-risk” or equivalent policy form and shall include, without limitation, insurance against the perils of fire (with extended coverage) and physical loss or damage including, without duplication of coverage, theft, vandalism, malicious mischief, collapse, earthquake, flood, windstorm, falsework, testing and startup, temporary buildings and debris removal including demolition occasioned by enforcement of any applicable legal requirements, and shall cover reasonable compensation for the Architect’s, Contractor’s, and Construction Manager’s services and expenses required as a result of such insured loss.

§ 11.3.1.2 If the Owner does not intend to purchase such property insurance required by the Contract and with all of the coverages in the amount described above, the Owner shall so inform the Contractor in writing prior to commencement of the Work. The Contractor may then effect insurance that will protect the interests of the Contractor, Subcontractors and Sub-subcontractors in the Work, and by appropriate Change Order the cost thereof shall be charged to the Owner. If the Contractor is damaged by the failure or neglect of the Owner to purchase or maintain insurance as described above, without so notifying the Contractor in writing, then the Owner shall bear all reasonable costs properly attributable thereto.

§ 11.3.1.3 If the property insurance requires deductibles and such deductibles are identified in the Contract Documents, the Contractor, the Owner shall pay costs not covered because of such deductibles.

§ 11.3.1.4 This property insurance shall cover portions of the Work stored off the site, and also portions of the Work in transit.

§ 11.3.1.5 Partial occupancy or use in accordance with Section 9.9 shall not commence until the insurance company or companies providing property insurance have consented to such partial occupancy or use by endorsement or otherwise. The Owner and the Contractor shall take reasonable steps to obtain consent of the insurance company or companies and shall, without mutual written consent, take no action with respect to partial occupancy or use that would cause cancellation, lapse or reduction of insurance. Property insurance coverage for Contractor’s owned or hired equipment, tools, automobiles, and materials not incorporated into the final Work shall be the sole responsibility of the Contractor.

§ 11.3.2 **Boiler and Machinery Insurance.** The Owner shall purchase and maintain boiler and machinery insurance required by the Contract Documents or by law, which shall specifically cover such insured objects during installation and until final acceptance by the Owner; this insurance shall include interests of the Owner, Construction Manager, Contractor, Subcontractors and Sub-subcontractors in the Work, and the Owner and Contractor shall be named insureds.

§ 11.3.3 **Loss of Use Insurance.** The Owner, at the Owner’s option, may purchase and maintain such insurance as will insure the Owner against loss of use of the Owner’s property due to fire or other hazards, however caused. ~~The Owner waives all rights of action against the Contractor for loss of use of the Owner’s property, including consequential losses due to fire or other hazards however caused.~~

§ 11.3.4 If the Contractor requests in writing that insurance for risks other than those described herein or other special causes of loss be included in the property insurance policy, the Owner shall, if possible, include such insurance, and the cost thereof shall be charged to the Contractor by appropriate Change Order.

~~§ 11.3.5 If during the Project construction period the Owner insures properties, real or personal or both, adjoining or adjacent to the site by property insurance under policies separate from those insuring the Project, or if after final payment property insurance is to be provided on the completed Project through a policy or policies other than those insuring the Project during the construction period, the Owner shall waive all rights in accordance with the terms of Section 11.3.7 for damages caused by fire or other causes of loss covered by this separate property insurance. All separate policies shall provide this waiver of subrogation by endorsement or otherwise. Other than acts of the Owner or God (fire, lightning, hail, rainstorm, or other serious adverse weather event), each member of the Construction Team shall be responsible for the first Ten Thousand Dollars (\$10,000) of any loss of or damage to property to the extent of any damage caused by its negligence or intentional acts. If more than one member of the Construction Team causes a loss or damage to property in the same occurrence, each member of the Construction Team shall pay a proportion of the Ten Thousand Dollars (\$10,000), determined in the discretion of the Contractor and the Owner.~~

§ 11.3.6 Before an exposure to loss may occur, the Owner shall file with the Contractor a copy of each policy that includes insurance coverages required by this Section 11.3. Each policy shall contain all generally applicable conditions, definitions, exclusions and endorsements related to this Project. Each policy shall contain a provision that the policy will not be canceled or allowed to expire, and that its limits will not be reduced, until at least 30 days' prior written notice has been given to the Contractor.

§ 11.3.7 **Waivers of Subrogation.** ~~The Owner and Contractor waive all rights against (1) each other and any of their subcontractors, sub-subcontractors, agents and employees each of the other, and (2) the Construction Manager, Architect, Architect's consultants, separate contractors described in Article 6, if any, and any of their subcontractors, sub-subcontractors, agents and employees, for damages caused by fire or other causes of loss to the extent covered by property insurance obtained pursuant to this Section 11.3 or other property insurance applicable to the Work, except such rights as the Owner and Contractor may have to the proceeds of such insurance held by the Owner as fiduciary. The Owner or Contractor, as appropriate, shall require of the Construction Manager, Construction Manager's consultants, Architect, Architect's consultants, Owner's separate contractors described in Article 6, if any, and the subcontractors, sub-subcontractors, agents and employees of any of them, by appropriate agreements, written where legally required for validity, similar waivers each in favor of other parties enumerated herein. The policies shall provide such waivers of subrogation by endorsement or otherwise. A waiver of subrogation shall be effective as to a person or entity even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise, did not pay the insurance premium directly or indirectly, and whether or not the person or entity had an insurable interest in the property damaged.~~

§ 11.3.8 A loss insured under the Owner's property insurance shall be adjusted by the Owner as fiduciary and made payable to the Owner as fiduciary for the insureds, as their interests may appear, subject to requirements of any applicable mortgagee clause and of Section 11.3.10. The Contractor shall pay Subcontractors their just shares of insurance proceeds received by the Contractor, and by appropriate agreements, written where legally required for validity, shall require Subcontractors to make payments to their Sub-subcontractors in similar manner.

§ 11.3.9 ~~If required in writing by a party in interest, the Owner as fiduciary shall, upon occurrence of an insured loss, give bond for proper performance of the Owner's duties. The cost of required bonds shall be charged against proceeds received as fiduciary. The Owner shall deposit in a separate account proceeds so received, which the Owner shall distribute in accordance with such agreement as the parties in interest may reach, or as determined in accordance with the method of binding dispute resolution selected in the Agreement between the Owner and Contractor. If after such loss no other special agreement is made and unless the Owner terminates the Contract for convenience, replacement of damaged property shall be performed by the Contractor after notification of a Change in the Work in accordance with Article 7.~~

§ 11.3.10 The Owner as fiduciary shall have power to adjust and settle a loss with insurers ~~unless one of the parties in interest shall object in writing within five days after occurrence of loss to the Owner's exercise of this power; if such objection is made, the dispute shall be resolved in the manner selected by the Owner and Contractor as the method of binding dispute resolution in the Agreement. If the Owner and Contractor have selected arbitration as the method of binding dispute resolution, the Owner as fiduciary shall make settlement with insurers or distribution of insurance proceeds in accordance with the direction of the arbitrators.~~

§ 11.4 Performance Bond and Payment Bond

§ 11.4.1 The Owner ~~shall have the right to require the Contractor to furnish bonds hereby~~ requires the Contractor to furnish separate Performance and Labor and Material Payment Bonds covering faithful performance of the Contract and payment of obligations arising thereunder ~~as stipulated in bidding requirements or specifically required in the Contract Documents on the date of execution of the Contract each in the penal sum of 100% of the Contract Sum and in accordance with Applicable Laws on the date of execution of the Contract. Bonds shall be executed by a responsible surety licensed in the state where the Work is located with a Best's rating of not less than A, XII or better and shall remain in effect for a period not less than two (2) years following the later of (i) the date of Substantial Completion, (ii) the time required to resolve any items of incomplete Work and the payment of any disputed amount or expiration of the Warranty under the Contract.~~

§ 11.4.2 Upon the request of any person or entity appearing to be a potential beneficiary of bonds covering payment of obligations arising under the Contract, the Contractor shall promptly furnish a copy of the bonds or shall authorize a copy to be furnished.

§ 11.4.3 The Construction Manager shall obtain copies of the Performance Bond and Payment Bond required by the Agreement from the Contractor prior to Contractor beginning performance pursuant to the Agreement. The Contractor's obligation to provide such bonds shall not be waived in any fashion, including any failure to secure such bonds prior to Contractor beginning performance pursuant to the Agreement.

§ 11.4.4 Each Subcontractor's Performance Bond and the Labor and Material Payment Bond shall each be "dual obligee" type bonds naming both the Owner and the Contractor as obligees.

§ 11.5 Insurance In General

§ 11.5.1 At the written request of the Owner to the Contractor, the Contractor shall provide to the Owner a copy of any insurance policy required herein within five (5) calendar days of such written request (or a binder if a policy is not yet available). If the Contractor fails to submit a copy of any insurance policy within five (5) calendar days of such written request or if the insurance is in form or insurer unacceptable to the Owner, Owner shall have the right, but not the obligation, to purchase insurance ("Replacement Insurance") in the name of the applicable member of the Construction Team. Upon purchase of Replacement Insurance the Owner shall issue and the Contractor shall execute a Change Order reducing the Contract Sum by the cost of the Replacement Insurance. The Contractor shall furnish all necessary information to obtain and maintain such Replacement Insurance.

§ 11.5.2 The Contractor's liability and indemnification obligations to the Owner under the Agreement shall not be relieved or diminished by securing insurance coverage in accordance with the Owner's requirements or by the Owner's acceptance of certificates of insurance or policies. Any acceptance of insurance coverage by the Owner shall not be construed as accepting in any way deficiencies in the insurance.

§ 11.5.3 Except as set forth in Section 5.3.1.1, the minimum insurance requirements specified in this Agreement apply to each member of the Construction Team.

ARTICLE 12 UNCOVERING AND CORRECTION OF WORK

§ 12.1 Uncovering of Work

§ 12.1.1 If a portion of the Work is covered contrary to the Construction Manager's or Architect's request or to requirements specifically expressed in the Contract Documents, it must, if requested in writing by either, be uncovered for their observation and be replaced at the Contractor's sole cost and expense without change in the Contract Time.

§ 12.1.2 If a portion of the Work has been covered which the Construction Manager or Architect has not specifically requested to observe prior to its being covered, the Construction Manager or Architect may request, with the Owner's written consent, to see such Work and it shall be uncovered by the Contractor. If such Work is in accordance with the Contract Documents, costs of uncovering and replacement shall, by appropriate Change Order, be at the Owner's expense. At the time Owner's consent is sought as described herein, the Architect and/or Construction Manager shall notify the Owner that additional costs may apply if the Work is in accordance with the Contract Documents. If such Work is not in accordance with the Contract Documents, such costs and the cost of correction shall be at the Contractor's expense unless the condition was caused by the Owner or one of the other Contractors in which event the Owner or the separate Contractor, shall be responsible for payment of such costs.

§ 12.2 Correction of Work

§ 12.2.1 Before or After Substantial Completion

The Contractor shall promptly correct Work rejected by the Construction Manager or Architect or failing to conform to the requirements of the Contract Documents, whether discovered before or after Substantial Completion and whether or not fabricated, installed or completed. Costs of correcting such rejected Work, including additional testing and inspections, the cost of uncovering and replacement, and compensation for the Construction Manager's and Architect's services and expenses made necessary thereby, shall be at the Contractor's expense. The Owner and/or the Architect may reject defective or unsatisfactory Work. The Contractor shall promptly cause all Work rejected by the Owner and/or Architect, whenever observed prior to Final Completion, to be corrected without extension of the Construction Time or increase in the Contract Sum and without use of any contingency. If any additional testing, inspections and compensation for the Architect's services and expenses are incurred because of corrective Work, the Contractor shall pay them promptly upon demand.

§ 12.2.2 After Substantial Completion

§ 12.2.2.1 In addition to the Contractor's obligations under Section 3.5, if, within ~~one-two (2)~~ years after the date of Substantial Completion of the Work or designated portion thereof, or after the date for commencement of warranties established under Section 9.9.1, or by terms of an applicable special warranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, the Contractor shall, without interfering with the Owner's facilities, personnel or operations, correct it promptly after receipt of written notice from the Owner to do so unless the Owner has previously given the Contractor a written acceptance of such condition. The Owner shall give such notice promptly after discovery of the condition. ~~During the one-year period for correction of Work, if the Owner fails to notify the Contractor and give the Contractor an opportunity to make the correction, the Owner waives the rights to require correction by the Contractor and to make a claim for breach of warranty.~~ If the Contractor fails to correct nonconforming Work within a reasonable time during that period after receipt of notice from the Owner or Architect, the Owner may correct it in accordance with Section 2.4. These obligations shall apply regardless of whether such Work has been fabricated, installed, or completed and shall survive acceptance of the Work and termination of the Agreement.

§ 12.2.2.2 ~~The one-year period shall be extended with respect to portions of Work first performed after Substantial Completion by the period of time between Substantial Completion and the actual completion of that portion of the Work. Upon completion of any Work under or pursuant to Section 12.2.2 the two (2) year Correction Period specified by Section 12.2.2 shall begin anew with respect to the Work requiring correction.~~

§ 12.2.2.3 ~~The one-year period for correction of Work shall not be extended by corrective Work performed by the Contractor pursuant to this Section 12.2.~~

§ 12.2.3 The Contractor shall remove from the Project site portions of the Work that are not in accordance with the requirements of the Contract Documents and are neither corrected by the Contractor nor accepted by the Owner.

§ 12.2.4 The Contractor shall bear the cost of correcting destroyed or damaged construction, whether completed or partially completed, of the Owner or separate contractors or other Multiple Prime Contractors caused by the Contractor's correction or removal of Work that is not in accordance with the requirements of the Contract Documents.

§ 12.2.5 Nothing contained in this Section 12.2 shall be construed to establish a period of limitation with respect to other obligations the Contractor ~~has might have~~ under the Contract Documents. Establishment of the ~~one-two (2)~~ year period for correction of Work as described in Section 12.2.2 relates only to the specific obligation of the Contractor to correct the Work, and has no relationship to the time within which the obligation to comply with the Contract Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Contractor's liability with respect to the Contractor's obligations other than specifically to correct the Work.

§ 12.2.6 Each Contractor shall guarantee work for two (2) years, except where a longer guarantee period is stipulated in the Contract Documents, from the date of Substantial Completion of the Project. No provisions of the Contract Documents nor the Final Certificate for Payment shall relieve the Contractor of responsibility for satisfactory material or workmanship within the period described above. It shall be the Contractors responsibility to remedy any faulty material or workmanship and any damage to other work by removing and replacing same without any extra charge whatsoever.

§ 12.2.7 Unless the Owner authorizes otherwise, Substantial Completion shall not commence the Correction Period for any equipment or systems that:

- .1 Are not fully operational (equipment or systems shall not be considered fully operational if they are intended to provide service to any portion of the building which the Owner has not accepted as substantially complete); or
- .2 Are not accepted by the Owner.

§ 12.3 Acceptance of Nonconforming Work

If the Owner prefers to accept Work that is not in accordance with the requirements of the Contract Documents, or otherwise defective, the Owner may do so instead of requiring its removal and correction, in which case the Contract Sum will be reduced by as appropriate and equitable amount which reflects the loss of value to the Owner caused by

the Defective Work. Such adjustment shall be effected whether or not final payment has been made, and if it occurs after Final Payment is made, the Contractor shall pay the Owner whatever sum is owed upon demand.

If, within one (2) years after the date of (i) Substantial Completion and acceptance of the Work or any designated portion thereof or (ii) the completion of Work not finished at Substantial Completion, or within the terms of an applicable special warranty required by the Contract Documents (the "Correction Period"), any of the Work is found by the Owner to be defective, the Contractor shall, without interfering with the Owner's facilities, personnel or operations, promptly cause it to be corrected, unless the Owner has previously specifically accepted such defect in writing. The Contractor shall bear all costs of correcting rejected Work, without increase in the Cost, including any additional testing and inspections made necessary thereby. These obligations shall apply regardless of whether such Work has been fabricated, installed, or completed and shall survive acceptance of the Work and termination of the Agreement.

§ 12.4 Owner's Right To Correct Or Remove Defective Work

§ 12.4.1 If the Contractor fails to cause defective Work to be corrected within a reasonable time after receipt of notice from the Owner, the Owner may correct it and the Contractor shall pay the Owner all costs of correction (including the value of the Owner's staff time) upon demand. Alternatively, in the event of such failure, the Owner may (without being deemed a bailee) remove it and store the salvable materials or equipment at the Contractor's expense. If the Contractor does not pay costs of such removal and storage within ten (10) days after written notice, the Owner may upon ten (10) additional days' written notice sell such materials and equipment at auction or at private sale and shall account for the proceeds thereof, after deducting from the sale proceeds all costs, expenses and damages that should have been borne by the Contractor (including the value of the Owner's staff time and reasonable attorneys' fees). If the proceeds of sale do not cover costs which the Contractor should have borne, the Contract Sum shall be reduced by the deficiency, plus interest. If payments then or thereafter due the Contractor are not sufficient to cover the amount owed, the Contractor shall pay the difference to the Owner immediately upon demand.

§ 12.4.2 The Owner's right to store and sell such defective Work shall not give rise to a duty to do so. Instead, the Owner may upon ten (10) day's prior written notice simply dispose of such defective Work as it sees fit. All costs of disposal shall be borne by the Contractor, without recovery from the Owner, under the Contract Sum, any contingency or otherwise.

§ 12.4.3 Tests. If tests or inspections reveal that portions of the Work are Defective, any additional tests or inspections required to assure the Architect and the Owner that the defective Work has been remedied or is in an acceptable condition shall be conducted at the expense of the Contractor, without increase in the Contract Sum, and without use of any contingency. The Contractor shall pay all additional costs of the Architect and the Owner, which are associated with such additional tests or inspections.

§ 12.4.4 Periods of Limitation. Nothing contained in this Article 12 shall be construed to establish a period of limitation with respect to other obligations, which the Contractor might have under the Contract Documents or Applicable Laws. Establishment of the Correction Period relates only to the specific obligation of the Contractor to correct the Work under this Article 12 and has no relationship to the time within which the obligation to comply with the Agreement may be sought to be enforced by the Owner, nor to the time within which proceedings may be commenced to establish the Contractor's liability with respect to its obligations under the Agreement.

§ 12.4.5 The Owner's Right to Stop the Work. If the Contractor fails to correct Work, which is not in accordance with the requirements of the Contract Documents as required by Section 12.2.2 or fails to carry out the Work in accordance with the Contract Documents, the Owner may, by written order, direct the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, the right of the Owner to stop the Work shall not give rise to a duty on the part of the Owner to exercise this right for the benefit of the Contractor or any other person or entity.

§12.5 Damage

§ 12.5.1 If prior to the date of Final Completion any member of the Construction Team uses or damages any portion of the Work or other property, including, without limitation, mechanical, electrical, plumbing and other building systems, machinery, equipment or other mechanical device, the Contractor shall cause such item to be restored to "like new" condition at no expense to the Owner, without recovery from the Owner, under the Contract Sum, any contingency or otherwise.

§ 12.5.2 The Contractor shall bear the cost of correcting destroyed or damaged construction or other property,

whether completed or partially completed, of the Owner or separate contractors caused by the Contractor's correction or removal of Work which is not in accordance with the requirements of the Contract Documents.

§ 12.5.3 Nothing in this Section 12.5 either limits the parties' rights to obtain recovery from any applicable property insurance or entitles the insurer to pursue a subrogation claim.

ARTICLE 13 MISCELLANEOUS PROVISIONS

§ 13.1 Governing Law

The Contract shall be governed by the law of the ~~place where the Project is located except that, if the parties have selected arbitration as the method of binding dispute resolution, the Federal Arbitration Act shall govern~~ Section 15.4 State of Michigan.

§ 13.2 Successors and Assigns

§ 13.2.1 The Owner and Contractor respectively bind themselves, their partners, successors, assigns and legal representatives to covenants, agreements and obligations contained in the Contract Documents. Except as provided in Section 13.2.2, neither party to the Contract shall assign the Contract as a whole without written consent of the other. If either party attempts to make such an assignment without such consent, that party shall nevertheless remain legally responsible for all obligations under the Contract.

§ 13.2.2 The Owner may, without consent of the Contractor, assign the Contract to a lender providing construction financing for the Project, if the lender assumes the Owner's rights and obligations under the Contract Documents. The Contractor shall execute all consents reasonably required to facilitate such assignment.

§ 13.3 Written Notice

Written notice shall be deemed to have been duly served if delivered in person to the individual, to a member of the firm or entity or to an officer of the corporation for which it was intended; or if delivered at or sent by registered or certified mail or by national overnight courier service providing a tracking system and proof of delivery to, the last business address known to the party giving notice.

Wherever the Contract Documents require the Contractor to give "Notice" or "Timely Notice" to the Architect, Public Authority, and/or others, it shall be the Contractor's responsibility to furnish all such notices sufficiently in advance to allow the party receiving the notice reasonable time to react to such notice, including travel time on the job site as necessary, when such notices require the on-site presence of the Architect, Public Authority, their authorized representatives, or others for field observation of inspections, testing or approvals. Reasonable time shall be defined as no less than 24 hours plus normal travel time from the home office of the party being notified to the job site and must also accommodate known, standard, or reasonable processing periods.

§ 13.4 Rights and Remedies

§ 13.4.1 Duties and obligations imposed by the Contract Documents and rights and remedies available thereunder shall be in addition to and not a limitation of duties, obligations, rights and remedies otherwise imposed or available by law.

§ 13.4.2 No action or failure to act by the Owner, Construction Manager, Architect or Contractor shall constitute a waiver of a right or duty afforded them under the Contract, nor shall such action or failure to act constitute approval or acquiescence in a breach thereunder, except as may be specifically agreed in writing.

§ 13.5 Tests and Inspections

§ 13.5.1 Tests, inspections and approvals of portions of the Work shall be made as required by the Contract Documents and by ~~a~~ Applicable laws, statutes, ordinances, codes, rules and regulations or lawful orders of public authorities. Unless otherwise provided, the Contractor shall make arrangements for such tests, inspections and approvals with an independent testing laboratory or entity acceptable to the Owner, or with the appropriate public authority, and shall bear all related costs of tests, inspections and approvals. The Contractor shall give the Construction Manager and Architect timely notice of when and where tests and inspections are to be made so that the Construction Manager and Architect may be present for such procedures. The Owner shall bear costs of (1) tests, inspections or approvals that do not become requirements until after bids are received or negotiations concluded, and (2) tests, inspections or approvals where building codes or applicable laws or regulations prohibit the Owner from delegating their cost to the Contractor.

§ 13.5.2 If the Construction Manager, Architect, Owner or public authorities having jurisdiction determine that portions of the Work require additional testing, inspection or approval not included under Section 13.5.1, the Construction Manager and Architect will, upon written authorization from the Owner, instruct the Contractor to make arrangements for such additional testing, inspection or approval by an entity acceptable to the Owner, and the Contractor shall give timely notice to the Construction Manager and Architect of when and where tests and inspections are to be made so that the Construction Manager and Architect may be present for such procedures. Such costs except as provided in Section 13.5.3, shall be at the Owner's expense.

§ 13.5.3 If such procedures for testing, inspection or approval under Sections 13.5.1 and 13.5.2 reveal failure of the portions of the Work to comply with requirements established by the Contract Documents or Applicable Law, all costs made necessary by such failure including those of repeated procedures and compensation for the Construction Manager's and Architect's services and expenses shall be at the Contractor's expense.

§ 13.5.4 Required certificates of testing, inspection or approval shall, unless otherwise required by the Contract Documents, be secured by the Contractor and promptly delivered to the Construction Manager for transmittal to the Architect.

§ 13.5.5 If the Construction Manager or Architect is to observe tests, inspections or approvals required by the Contract Documents, the Construction Manager or Architect will do so promptly and, where practicable, at the normal place of testing.

§ 13.5.6 Tests or inspections conducted pursuant to the Contract Documents shall be made promptly to avoid unreasonable delay in the Work.

§ 13.6 Interest

Payments due and unpaid under the Contract Documents shall bear interest from the date payment is due at such rate as the parties may agree upon in writing or, in the absence thereof, at the legal rate prevailing from time to time at the place where the Project is located.

§ 13.7 Time Limits on Claims

The Owner and the Contractor shall commence all claims and causes of action, whether in contract, tort, breach of warranty or otherwise, against the other arising out of or related to the Contract in accordance with the requirements of the final dispute resolution method selected in their accordance with Michigan law, regardless of time framed identified in this Agreement within the time period specified by applicable law, but in any case not more than 10 years after the date of Substantial Completion of the Work. The Owner and the Contractor waive shall commence all claims and causes of action not commenced in accordance with this Section 13.7 Agreement and in accordance with Michigan law.

§ 13.7.2 Regardless of any provisions to the contrary, the statute of limitations with respect to any defective or nonconforming Work which is not discovered by the Owner shall not commence until the discovery of such defective or nonconforming Work by the Owner.

§ 13.8 Surety Notice And Prior Approval

Except where otherwise expressly required by the terms of the Agreement, the Contract Documents or the General Conditions, exercise by the Owner of any contractual or legal right or remedy without prior notice to or approval by the Contractor's surety shall in no way bar or prohibit the Owner's ability to pursue such right or remedy. Further, pursuit of such a right or remedy without prior notice to or approval of surety shall in no way compromise, limit or bar any claim by the Owner against a surety bond of the Contractor.

§ 13.9 Owner Policies

The Construction Manager and Contractor agree to follow the Owner's policies and procedures in regards to working in and around school facilities. The Owner reserves the right to remove individuals from the Project sites who do not strictly comply.

ARTICLE 14 TERMINATION OR SUSPENSION OF THE CONTRACT

§ 14.1 Termination by the Contractor

§ 14.1.1 The Contractor may terminate the Contract if the Work is stopped for a period of 30 consecutive days through no act or fault of the Contractor or a Subcontractor, Sub-subcontractor or their agents or employees or any other persons or entities performing portions of the Work under direct or indirect contract with the Contractor, for any of the following reasons:

- .1 Issuance of an order of a court or other public authority having jurisdiction that requires all Work to be stopped;
- .2 An act of government, such as a declaration of national emergency that requires all Work to be stopped;
- .3 Because the ~~Owner Construction Manager~~ has not ~~certified or the Architect has not issued made payment on~~ a Certificate for Payment ~~and has not notified the Contractor of the reason for withholding certification as provided in Section 9.4, or because the Owner has not made payment on a Certificate for Payment~~ within the time stated in the Contract Documents subject to justifiable withholding of payment as described herein or in the Contract Documents; or
- .4 The Owner has failed to furnish to the Contractor promptly, upon the Contractor's request, reasonable evidence as required by Section 2.2.1.

§ 14.1.2 The Contractor may terminate the Contract if, through no act or fault of the Contractor or a Subcontractor, Sub-subcontractor or their agents or employees or any other persons or entities performing portions of the Work under direct or indirect contract with the Contractor, repeated suspensions, delays or interruptions of the entire Work by the Owner as described in Section 14.3 constitute in the aggregate more than 100 percent of the total number of days scheduled for completion, or 120 days in any 365-day period, whichever is less.

§ 14.1.3 If one of the reasons described in Section 14.1.1 or 14.1.2 exists, the Contractor may, upon ~~seven-thirty~~ days' written notice to the Owner, Construction Manager and Architect, terminate the Contract and recover from the Owner payment for Work executed ~~including reasonable overhead and profit, costs incurred by reason of such termination, and damages.~~

§ 14.1.4 If the Work is stopped for a period of ~~6~~90 consecutive days through no act or fault of the Contractor or a Subcontractor or their agents or employees or any other persons performing portions of the Work under contract with the Contractor because the Owner has repeatedly failed to fulfill the Owner's obligations under the Contract Documents with respect to matters important to the progress of the Work, the Contractor may, upon ~~thirtyseven~~ additional days' written notice to the Owner, Construction Manager and Architect, terminate the Contract and recover from the Owner as provided in Section 14.1.3.

§ 14.2 Termination by the Owner for Cause

§ 14.2.1 The Owner may terminate the Contract if the Contractor

- .1 ~~repeatedly~~ refuses or fails to supply enough properly skilled workers or proper materials to the point of negatively impacting the Project and/or the related schedule;
- .2 fails to make payment to Subcontractors for materials or labor in accordance with the respective agreements between the Contractor and the Subcontractors;
- .3 ~~repeatedly~~ disregards ~~a~~Applicable ~~H~~aws, statutes, ordinances, codes, rules and regulations, or lawful orders of a public authority; ~~or~~
- .4 otherwise is guilty of substantial breach of a provision of the Contract Documents; ~~or~~
- .5 the Contractor fails to prosecute the Work or any part thereof with promptness and diligence or fails to perform any provisions of this Contract, or goes into bankruptcy, liquidation, makes an assignment for the benefit of creditors, enters into a composition with its creditors, or becomes insolvent.

§ 14.2.2 When any of the above reasons exist, the Owner, after consultation with the Construction Manager, and upon certification by the Initial Decision Maker that sufficient cause exists to justify such action, may without prejudice to any other rights or remedies of the Owner and after giving the Contractor and the Contractor's surety, if any, ~~three (3) seven~~ days' written notice, terminate ~~employment of the Contractor and may, subject to any prior rights of the surety the Contractor's right to proceed with the Work, or such part of the Work as to which such defaults have occurred, and may take any one or more of the following actions:~~

- .1 Exclude the Contractor from the site and take possession of all materials, equipment, tools, and construction equipment and machinery thereon owned by the Contractor;

- .2 Accept assignment of subcontracts pursuant to Section 5.4; and
- .3 Finish the Work by whatever reasonable method the Owner may deem expedient. Upon written request of the Contractor, the Owner shall furnish to the Contractor a detailed accounting of the costs incurred by the Owner in finishing the Work.

In the event the Contractor's surety bond requires notice of intent to declare a default of the Contractor and if such bond notice is provided by the Owner, such notice shall be adequate to satisfy the three (3) day written notice described above in this section.

§ 14.2.3 When the Owner terminates the Contract for one of the reasons stated in Section 14.2.1, the Contractor shall not be entitled to receive further payment until the Work is finished.

§ 14.2.4 If the unpaid balance of the Contract Sum exceeds costs of finishing the Work, including compensation for the Construction Manager's and Architect's services and expenses made necessary thereby, and other damages incurred by the Owner in pursuing termination and completion of the Work, including actual attorney and legal fees and costs, and not expressly waived, such excess shall be paid to the Contractor. If such costs and damages exceed the unpaid balance, the Contractor shall pay the difference to the Owner. The amount to be paid to the Contractor or Owner, as the case may be, shall, upon application, be certified by the Initial Decision Maker after consultation with the Construction Manager, and this obligation for payment shall survive termination of the Contract.

§ 14.3 Suspension by the Owner for Convenience

§ 14.3.1 The Owner may, without cause, order the Contractor in writing to suspend, delay or interrupt the Work in whole or in part for such period of time as the Owner may determine.

§ 14.3.2 The Contract Sum and the Contract Time shall be adjusted for increases in the cost and time caused by suspension, delay or interruption as described in Section 14.3.1. Adjustment of the Contract Sum shall include profit. No adjustment shall be made to the extent:

- .1 that performance is, was or would have been so suspended, delayed or interrupted by another cause for which the Contractor is responsible; or
- .2 that an equitable adjustment is made or denied under another provision of this Contract.

§ 14.4 Termination by the Owner for Convenience

§ 14.4.1 The Owner may, at any time, terminate the Contract for the Owner's convenience and without cause.

§ 14.4.2 Upon receipt of written notice from the Owner of such termination for the Owner's convenience, the Contractor shall

- .1 cease operations as directed by the Owner in the notice;
- .2 take actions necessary, or that the Owner may direct, for the protection and preservation of the Work; and
- .3 except for Work directed to be performed prior to the effective date of termination stated in the notice, terminate all existing subcontracts and purchase orders and enter into no further subcontracts and purchase orders.

§ 14.4.3 In case of such termination for the Owner's convenience, the Contractor shall be entitled to receive payment for Work executed as of the date of termination by the Owner and subject to negotiation by both parties, and costs incurred by reason of such termination, along with reasonable overhead and profit on the Work not executed.

ARTICLE 15 CLAIMS AND DISPUTES

§ 15.1 Claims

§ 15.1.1 **Definition.** A Claim is a demand or assertion by one of the parties seeking, as a matter of right, payment of money, or other relief with respect to the terms of the Contract, including but not limited to, additional sums, additional time for performance, or damages for delay. The term "Claim" also includes other disputes and matters in question between the Owner and Contractor arising out of or relating to the Contract. The responsibility to substantiate Claims shall rest with the party making the Claim.

§ 15.1.1.1 Changes in Law. If changes in ordinances, laws, requirements, or regulations or changes (which could not reasonably have been anticipated prior to the execution of the Contract) in judicial or agency interpretations of such

ordinances, laws, requirements or regulations occur after execution which require an alteration of the Work or otherwise may result in a price or time impact, Contractor shall so notify Owner in writing consistent with Section 15.1.4 and comply with the procedures set out therein. Changes in the following areas of law are deemed to be within the scope of the Work hereunder and shall not be the basis for any change in price or time: requirements affecting the use or handling by Contractor of toxic or Hazardous Materials, Occupational Safety and Health Act requirements relating to Contractor's prosecution or conduct of the Work during the Project, or laws or requirements relating to operation of the business of construction contracting, engineering, or equipment manufacturing, or taxes affecting any such business.

§ 15.1.2 Notice of Claims. Claims by ~~either the Owner or Contractor~~ must be initiated by written notice to the ~~other party and to the Initial Decision Maker Owner~~ with a copy sent to the Construction Manager and Architect, ~~if the Construction Manager and or Architect is not serving as the Initial Decision Maker~~. Claims by ~~the Contractor either party~~ must be initiated within 21 days after occurrence of the event giving rise to such Claim or within 21 days after the claimant first recognizes the condition giving rise to the Claim, whichever is later except as provided in Sections 7.2, 8.3.4 and 8.4.3.

§ 15.1.3 Continuing Contract Performance. Pending final resolution of a Claim, except as otherwise agreed in writing or as provided in Section 9.7 and Article 14, the Contractor shall proceed diligently with performance of the Contract and the Owner shall continue to make payments in accordance with the Contract Documents. The ~~Construction Manager Architect~~ will prepare Change Orders and ~~the Architect will~~ issue a Certificate for Payment or Project Certificate for Payment in accordance with the decisions of the Initial Decision Maker.

§ 15.1.4 Claims for Additional Cost. If the Contractor wishes to make a Claim for an increase in the Contract Sum, written notice as provided herein shall be given before proceeding to execute the Work. Failure to provide such notice shall serve as an absolute bar against a claim for such an increase in the Contract Sum. Prior notice is not required for Claims relating to an emergency endangering life or property arising under Section 10.3.

§ 15.1.5 Claims for Additional Time

§ 15.1.5.1 If the Contractor wishes to make a Claim for an increase in the ~~Contract Construction~~ Time, written notice ~~as provided herein~~ shall be given pursuant to Section 8.3.4. The Contractor's Claim shall include an estimate of cost and of probable effect of delay on progress of the Work. In the case of a continuing delay only one Claim is necessary.

§ 15.1.5.2 If adverse weather conditions are the basis for a Claim for additional time, such Claim shall be made and governed by the provisions of Section 8.3.4 documented by data substantiating that weather conditions were abnormal for the period of time, could not have been reasonably anticipated and had an adverse effect on the scheduled construction.

§ 15.1.6 Claims for Consequential Damages. The Contractor and Owner waive Claims against each other for consequential damages arising out of or relating to this Contract. This mutual waiver includes

- .1 damages incurred by the Owner for rental expenses, for losses of use, income, profit, financing, business and reputation, and for loss of management or employee productivity or of the services of such persons; and
- .2 damages incurred by the Contractor for principal office expenses including the compensation of personnel stationed there, for losses of financing, business and reputation, and for loss of profit except anticipated profit arising directly from the Work.

This mutual waiver is applicable, without limitation, to all consequential damages due to either party's termination in accordance with Article 14. Nothing contained in this Section 15.1.6 shall be deemed to preclude an award of liquidated damages, when applicable, in accordance with the requirements of the Contract Documents.

§ 15.2 Initial Decision

§ 15.2.1 Claims, excluding those arising under Sections 10.3, 10.4, 11.3.9, and 11.3.10, shall be referred to the Initial Decision Maker for initial decision. The Architect will serve as the Initial Decision Maker, ~~unless otherwise indicated in the Agreement~~. Except for those Claims excluded by this Section 15.2.1, an initial decision shall be required as a condition precedent to mediation litigation or any other mutually agreed upon dispute resolution forum of any Claim arising prior to the date final payment is due, unless 30 days have passed after the Claim has been

referred to the Initial Decision Maker with no decision having been rendered. Unless the Initial Decision Maker and all affected parties agree, the Initial Decision Maker will not decide disputes between the Contractor and persons or entities other than the Owner.

§ 15.2.2 The Initial Decision Maker will review Claims and within ten days of the receipt of a Claim take one or more of the following actions: (1) request additional supporting data from the claimant or a response with supporting data from the other party, (2) reject the Claim in whole or in part, (3) approve the Claim, (4) suggest a compromise, or (5) advise the parties that the Initial Decision Maker is unable to resolve the Claim if the Initial Decision Maker lacks sufficient information to evaluate the merits of the Claim or if the Initial Decision Maker concludes that, in the Initial Decision Maker's sole discretion, it would be inappropriate for the Initial Decision Maker to resolve the Claim.

§ 15.2.3 In evaluating Claims, the Initial Decision Maker may, but shall not be obligated to, consult with or seek information from either party or from persons with special knowledge or expertise who may assist the Initial Decision Maker in rendering a decision. The Initial Decision Maker may request the Owner to authorize retention of such persons at the Owner's expense.

§ 15.2.4 If the Initial Decision Maker requests a party to provide a response to a Claim or to furnish additional supporting data, such party shall respond, within ten days after receipt of such request, and shall either (1) provide a response on the requested supporting data, (2) advise the Initial Decision Maker when the response or supporting data will be furnished or (3) advise the Initial Decision Maker that no supporting data will be furnished. Upon receipt of the response or supporting data, if any, the Initial Decision Maker will either reject or approve the Claim in whole or in part.

§ 15.2.5 The Initial Decision Maker will render an initial decision approving or rejecting the Claim, or indicating that the Initial Decision Maker is unable to resolve the Claim. This initial decision shall (1) be in writing; (2) state the reasons therefor; and (3) notify the parties and the Architect and Construction Manager, if the Architect or Construction Manager is not serving as the Initial Decision Maker, of any change in the Contract Sum or ~~Contract Construction~~ Time or both. The initial decision shall be final and binding on the parties but subject to mediation and, if the parties fail to resolve their dispute through mediation, to binding dispute resolution.

~~**§ 15.2.6** Either party may file for mediation of an initial decision at any time, subject to the terms of Section 15.2.6.1.~~

~~**§ 15.2.6.1** Either party may, within 30 days from the date of an initial decision, demand in writing that the other party file for mediation within 60 days of the initial decision. If such a demand is made and the party receiving the demand fails to file for mediation within the time required, then both parties waive their rights to mediate or pursue binding dispute resolution proceedings with respect to the initial decision.~~

§ 15.2.7 In the event of a Claim against the Contractor, the Owner may, but is not obligated to, notify the surety, if any of the nature and amount of the Claim. If the Claim relates to a possibility of a Contractor's default, the Owner may, but is not obligated to, notify the surety and request the surety's assistance in resolving the controversy.

§ 15.2.8 If a Claim relates to or is the subject of a mechanic's lien, the party asserting such Claim may proceed in accordance with applicable law to comply with the lien notice or filing deadlines.

§ 15.3 Mediation/Alternate Dispute Resolution

§ 15.3.1 Claims, disputes, or other matters in controversy arising out of or related to the Contract except those waived as provided for in Sections 9.10.4, 9.10.5, and 15.1.6 shall be subject to ~~mediation non-binding Alternative Dispute Resolution~~ as a condition precedent to binding dispute resolution. On those occasions when a dispute arises between the parties to this Agreement, the parties shall be compelled to seek an alternative means of resolving the dispute as a condition precedent to litigation. Therefore, the parties agree to the following terms and conditions:

The party bringing a claim shall give notice to the other party and, in writing, propose a meeting within seven (7) days after the claim arises in which to discuss and attempt to resolve the claim.

In the event the meeting between the parties to resolve the claim does not resolve the dispute or does not take place within said seven (7) day period, the parties shall designate, by mutual agreement, an independent mediator who shall

convene a meeting of the parties within a period of fourteen (14) days of the later of the initial meeting between the parties or the date notice was given pursuant to the Paragraph above. The mediator shall render his/her decision within seven (7) days of said meeting.

The purpose of the mediation is to attempt to resolve the dispute between the parties. The mediator shall not be empowered with the authority to render a binding opinion or award.

In the event the independent mediator's attempt to resolve the dispute between the parties fails, then each party will be free to pursue recovery of claims at law.

During the pendency of this alternative dispute resolution process, the parties agree that the statute(s) of limitations applicable to all claims that are the subject of this process shall be tolled.

§ 15.3.2 The parties shall endeavor to resolve their Claims by mediation which, unless the parties mutually agree otherwise, shall be administered by the American Arbitration Association in accordance with its Construction Industry Mediation Procedures in effect on the date of the Agreement. A request for mediation shall be made in writing, delivered to the other party to the Contract, and filed with the person or entity administering the mediation. The request may be made concurrently with the filing of binding dispute resolution proceedings but, in such event, mediation shall proceed in advance of binding dispute resolution proceedings, which shall be stayed pending mediation for a period of 60 days from the date of filing, unless stayed for a longer period by agreement of the parties or court order. If an arbitration is stayed pursuant to this Section 15.3.2, the parties may nonetheless proceed to the selection of the arbitrator(s) and agree upon a schedule for later proceedings.

§ 15.3.3 The parties shall share the mediator's fee and any filing fees equally. The mediation shall be held in the place where the Project is located, unless another location is mutually agreed upon. Agreements reached in mediation shall be enforceable as settlement agreements in any court having jurisdiction thereof.

§ 15.4 Arbitration

§ 15.4.1 If the parties have selected arbitration as the method for binding dispute resolution in the Agreement, any Claim subject to, but not resolved by, mediation shall be subject to arbitration which, unless the parties mutually agree otherwise, shall be administered by the American Arbitration Association in accordance with its Construction Industry Arbitration Rules in effect on the date of the Agreement. A demand for arbitration shall be made in writing, delivered to the other party to the Contract, and filed with the person or entity administering the arbitration. The party filing a notice of demand for arbitration must assert in the demand all Claims then known to that party on which arbitration is permitted to be demanded.

§ 15.4.1.1 A demand for arbitration shall be made no earlier than concurrently with the filing of a request for mediation, but in no event shall it be made after the date when the institution of legal or equitable proceedings based on the Claim would be barred by the applicable statute of limitations. For statute of limitations purposes, receipt of a written demand for arbitration by the person or entity administering the arbitration shall constitute the institution of legal or equitable proceedings based on the Claim.

§ 15.4.2 The award rendered by the arbitrator or arbitrators shall be final, and judgment may be entered upon it in accordance with applicable law in any court having jurisdiction thereof.

§ 15.4.3 The foregoing agreement to arbitrate and other agreements to arbitrate with an additional person or entity duly consented to by parties to the Agreement shall be specifically enforceable under applicable law in any court having jurisdiction thereof.

§ 15.4.4 Consolidation or Joinder

§ 15.4.4.1 Either party, at its sole discretion, may consolidate an arbitration conducted under this Agreement with any other arbitration to which it is a party provided that (1) the arbitration agreement governing the other arbitration permits consolidation, (2) the arbitrations to be consolidated substantially involve common questions of law or fact, and (3) the arbitrations employ materially similar procedural rules and methods for selecting arbitrator(s).

§ 15.4.4.2 Either party, at its sole discretion, may include by joinder persons or entities substantially involved in a common question of law or fact whose presence is required if complete relief is to be accorded in arbitration,

provided that the party sought to be joined consents in writing to such joinder. Consent to arbitration involving an additional person or entity shall not constitute consent to arbitration of any claim, dispute or other matter in question not described in the written consent.

§ 15.4.4.3 The Owner and Contractor grant to any person or entity made a party to an arbitration conducted under this Section 15.4, whether by joinder or consolidation, the same rights of joinder and consolidation as the Owner and Contractor under this Agreement.



BID CATEGORY 02 00 00 – DEMOLITION

The work of this bid category includes but is not limited to providing all labor, equipment, materials, scaffolding, hoisting and incidentals to complete all the **DEMOLITION** in accordance with the specifications, drawings and applicable codes. All work is to be performed as shown on the plans and specified in the following technical specification sections:

<u>Specification Section</u>	<u>Description of Section</u>
<u>DIVISION 2 – EXISTING CONDITONS</u>	
024116	Structure Demolition
024119	Selective Site Demolition
024119	Selective Demolition

In addition to the above, this bid category includes but is not limited to the Bidding Documents, the Bidding and Contract requirements and Division 1 General Requirements of the Project Manual and various other Technical Specifications interfacing with this work. The bidder is advised to review the work descriptions of the other categories and other referenced documents so as to not misunderstand scope responsibilities.

THE SCOPE OF THIS BID CATEGORY SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING ITEMS:

1. Each category shall be responsible for items of work as described in Section 00210 Descriptions of Work/Special Provisions/Requirements.
2. This contractor is responsible for all major building demolition of the project. Please note that certain items must be salvaged, re-installed and/or turned over to the CM or Owner. Each trade is responsible for cutting/capping/making-safe where renovations of existing systems occur.
3. This contractor is responsible for reclaiming brick from demolition as required for new walls or infills. Brick will be turned over to Bid Category 061000 for cleaning and reuse.
4. Contractor is responsible for maintaining a safe and clean site while performing scope of work, including dust control as needed.
5. Provide daily cleanup according to Barton Malow standards, including daily removal of all materials and debris related to this category.
6. Each contractor, while on site shall provide to Barton Malow one (1) person for each five tradesmen (or portion thereof) employed at the site, one day a week for up to four (4) hours , for the exclusive purpose of performing overall project weekly cleanup.
7. Coordination with other trades, including mandatory participation in job meetings.
8. Please note: These buildings contain some asbestos and lead materials and will not be 100% clean for recycling of materials. An abatement contractor will be scheduled to properly dispose of all friable materials prior to the beginning of this scope of work. All non-friable materials (i.e. vinyl tile) will be left in place and will need to be disposed of properly by this trade. Asbestos Survey Reports are available at the Construction Manager's Field Office.
9. It is this contractor's responsibility to provide full fall protection per Barton Malow requirements. Any workers found deficient will be permanently removed from the jobsite.
10. Include in base bid all architectural demolition and mechanical demolition. Request clarification prior to bid submission if there are any questions pertaining to the demolition scope of work.
11. Include all shoring noted on plans and include an allowance of \$5,000 for additional shoring.
12. include all mechanical / plumbing / piping / sheet metal demo noted on the plans. Mechanical contractor will cut/cap/disconnect.
13. Include all removal and disposal of demolished items
14. Measure for new ductwork on roof by June 14th 2019.
15. Contractor must submit the training cards for the competent person to be trained in CPR, First Aid, Asbestos Awareness, Lead Renovator, and any other certifications required by the trade and area of work.
16. Project Safety – The following bullet points are requirements of all workers and anyone visiting this

project, in addition to all other Barton Malow safety requirements. All costs associated with the purchase of these items must be included as part of your bid and must be worn at all time while on this project.

- a. High visibility clothing must be worn at all times inside and outside. This can be a tee shirt, vest, coat or any other article of clothing that will allow for each worker to be easily noticed.
 - b. Hard hats and safety glasses must be worn at all times.
 - c. Protective gloves similar to the Workeasy WE300.
 - d. All contractors shall go through Barton Malow's safety orientation (safety video).
17. Contractor may be required to coordinate work to be performed outside of the normal business hours. Said work will be coordinated with BMC project superintendent.
 18. Please refer to proposed construction schedule in section 00230. Include all costs for remobilization and any labor rates increases in bid. All contractors must be able to provide appropriate man power to complete work as scheduled or earlier.
 19. Account 3 remobilizations minimum for any demo.
 20. All extras must be submitted within 60 days, or cost will be voided.
 21. Protect existing equipment and items to remain during construction including existing ceiling, walls and flooring. Contractors are to protect all existing floors and existing Owner's materials materials remaining on site. Including protection of existing building and finishes within the "pathway" through the building from the construction area to the exterior. Correction of damage due to lack of adequate protection will be the responsibility of this contractor. In addition, all work is to be performed through existing ceiling, be it lay-in, spline, drywall or plaster, etc. Contractors are to include the cost of repairing and patching, removal and reinstallation and replacement of ceilings, as required for work of their bid category.

EXCLUDED FROM THIS CONTRACTOR'S WORK IS:

1. None

SPECIAL CONSIDERATIONS:

1. All demolition work is assigned to the individual contractors that are responsible for the particular material or work in question. The contractor is to perform all demolition of the materials assigned in the specification sections listed in their own Description of Work, unless otherwise noted.
2. No deliveries will be accepted in or out of the construction site during the hours of 7:30am – 8:30am and 3:00pm – 4:00pm
3. Provide adequate supervision of your sub-contractors and your field personnel. This includes a field superintendent responsible for all work with the ability to make decisions.
4. Every contractor performing Demolition of any type must provide a person who is trained and certified in lead renovation. This "certified lead renovator" must be on site at all when demolition work is occurring. The contractor must also meet all new OSHA, MOSHA, and DEQ requirements regarding lead. Contractors will be required to supply their firm's name and copy of the certifications of the "Certified Lead Renovator" card as well as a copy of their firm's certifications as a startup document. All other photo documentation requirements as required under the regulation will be required to be provided during the "closeout" phase of construction (as well as a copy maintained by the contractors for 3 years after date of substantial completion). The contractors will be required to post a notification packet in the buildings notifying all occupants of the upcoming renovations. Please visit the EPA's website www.EPA.gov/lead for more information.

END OF BID CATEGORY 02 00 00 – Demolition

BID CATEGORY 042000 - MASONRY

The Work of this Bid Category includes but is not limited to providing all labor, equipment, materials, scaffolding, hoisting and incidentals to complete all in accordance with the Contract Documents and applicable codes. All Work is to be performed as shown on the plans and specified in the following Technical Specification sections:

<u>Specification Section</u>	<u>Description of Section</u>
<u>DIVISION 01 – GENERAL REQUIREMENTS</u>	All Sections
<u>DIVISION 02 – EXISTING CONDITIONS</u>	
024120	Sel. Demo
<u>DIVISION 04 - MASONRY</u>	
042000	Masonry
<u>DIVISION 07 – THERMAL AND MOISTURE PROTECTION</u>	
071113	Bituminous Dampproofing
072100	Building Insulation
078413	Firestopping

In addition to the above, this Bid Category requires adherence to and coordination with various other technical Specifications interfacing with this Work. The Bidder shall review the Work descriptions of the other Bid Categories as set forth in Section 00210 of the Project Manual and other referenced documents, so as to not misunderstand scope responsibilities.

THE SCOPE OF THIS BID CATEGORY SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING ITEMS:

1. This contractor shall be responsible for layout, engineering, and ongoing clean up as it pertains to this work, coordinate layout with other contractors.
2. Each category shall be responsible for items of work as described in Section 00210 Descriptions of Work/Special Provisions/Requirements.
3. This contractor shall be responsible for all layout, engineering, elevations and layout coordination with other contractors. It is the responsibility of this contractor to layout all work of this category from established control lines. Upon completion of the work, furnish signed and sealed as-builts that tie all site improvements to property lines and/or building corners and meet the requirements of Section 01700 of the Project Manual, as applicable.
4. Furnish and install all interior and exterior concrete masonry units, integral water repellants in masonry units and mortars, masonry foundations, masonry piers, face brick, glazed brick or CMU, acoustical block, glass blocks, bond beams, grouting, structural pre-cast lintels and copings, dampproofing, waterproofing, water repellants, insulation, compressible fillers, backer rod, anchors, ties, anchor bolts (grouted in masonry), reinforcing, re-steel, through-wall flashing and drip edges, end dams, building paper, weep holes, pre-molded expansion strip, joint materials, caulking and sealants and other accessories required for a complete masonry system.
5. This contractor shall provide adequate supervision of sub-contractors and field personnel. This includes a field superintendent responsible for all work with the ability to make decisions.
6. Contractor shall furnish and install all masonry, cast stone caps, and face brick.

7. Contractor to provide all wall bracing as required to complete their own work. All wall bracing shall comply with OSHA, MIOSHA and any other authorities having jurisdiction.
8. Contractor shall provide all fall protection, lifts and scaffolding as required to complete their own work. Fall Protection and scaffolding shall comply with MIOSHA, OSHA and any other authorities having jurisdiction.
9. This contractor will be responsible for all re-mobilization costs for all phases of work.
10. Contractor is responsible to verify all interior and exterior door dimensions within masonry to ensure proper fit. Masonry contractor is responsible to set and install all door frames that are within masonry. Door frames shall be provided by others.
11. This contractor shall obtain and pay for all permits required for the work described by this bid category.
12. This contractor shall be responsible for receiving, off-loading, and hoisting into/onto the building. This includes the safe and secure storage of materials related to this work
13. Coordinate with other trades, including mandatory participation in job meetings.
14. This contractor is responsible to install imbeds including but not limited to bearing plates and anchor bolts within this trades work, imbeds provided by others.
15. Furnish and install sleeves in all walls related to this bid category.
16. Provide dumpster and legal off site disposal for daily clean up for this trade.
17. Provide daily clean-up according to Barton Malow standards, including daily removal of all materials and debris related to this category. If daily clean-up is not performed, the Construction manager will provide a laborer to complete the clean-up and the appropriate contractor will be back charged.
18. Furnish and install all exterior concrete masonry units, above and below grade, face brick, pre-cast lintels, bond beams, masonry lintels, damp proofing, waterproofing, water repellants, insulation, compressible fillers, backer rod, anchors, ties, anchor bolts (grouted in masonry), reinforcing, through-wall flashing and drip edges, building paper, weep holes, pre-molded expansion strip, joint materials, caulking and sealants and other accessories shown or required for a complete product.
19. Provide and install cast-in-place concrete caps, stone caps, pre-cast concrete lintels, elastic caulk and neoprene joint seals where shown or required.
20. Provide all damproofing and fluid applied membrane air-barriers per the construction documents and as specified on new masonry exterior walls.
21. This contractor is responsible for all masonry cleaning and sealing of new masonry. Walls to receive paint, following the application of block filler, this contractor shall correct any aesthetic masonry deficiencies deemed unacceptable by Painting Contractor, Architect and Construction Manager. This contractor is responsible to clean existing brick at locations noted on drawings.
22. Furnish labor and materials to install and grout all hollow metal frames toothed in to new or existing masonry walls, as specified. Coordinate the hollow metal door frame delivery with the General Carpentry contractor.
23. Furnish and install all sealants, caulking and backer rod within exterior and interior masonry wall construction and when masonry abuts an existing dissimilar surface.
24. Provide masonry lintels at all new door openings in masonry work as shown.
25. **Only wet cutting will be permitted on silica containing material.**

26. Provide CMU infill where existing windows, doors, louvers, etc. have been removed. Tooth in brick to match existing.
27. Unload, handle, inventory, properly store and install all miscellaneous iron items furnished by others such as steel lintels, anchors, bearing plates, shelf angles and relieving angles for installation by this contractor.
28. Coordinate the location and sizes of all openings with the appropriate trades. Provide and coordinate the masonry openings for all architectural, mechanical and electrical equipment, louvers, ductwork, access doors, etc. set in masonry construction before work in that area begins.
29. Coordinate all bearing conditions and elevations for elevated slabs, structural steel, miscellaneous steel and steel angles for masonry deck relief. Cut in beam pockets for all structural members supported by existing walls including all sawcutting, grout, setting of anchor bolts and bearing plates and masonry infill after the structural members are set. Also, install all steel angle lintels with the appropriate expansion anchor for all masonry as detailed.
30. Cleaning of roadways as directed by the Construction Manager due to activities by this contractor. Include site dust control due to the activities being performed by this Bid Category. Maintain site grade during the scope of this Contractor's work. Maintain ruts to facilitate site accessibility.
31. This contractor is responsible for all masonry cleaning and sealing. Provide all cleaning and scraping of new masonry walls to receive paint.
32. This contractor shall examine all drawings (structural, architectural, mechanical and electrical, etc.) for work related to this category for openings requiring the installation of structural steel support. This includes coordinating with all trades. Masonry contractor to infill around all mechanical and electrical penetrations.
33. This Contractor shall review door head and jamb details, and include work shown under this scope of work.
34. Owners' operations take precedence over all construction activities. All cutover from existing systems to new systems shall not interfere with Owner operations. If certain construction activities are anticipated to cause disruption with owners' operations (noise, etc.), these activities shall be coordinated with the owner or scheduled on weekends/after hours.
35. Mason is to be responsible to the Painting Contractor that all surfaces are ready for first application of paint. Make necessary corrections. Upon completing an area, all block will be scraped and cleaned, including floor and corners. Clean all hollow metal frames and lintels prior to caulking and painting by others. Painter will block fill when walls are satisfactory. Cut out and replace chipped brick or block encountered at the end of the job. Tuck point all voids and remove all traces of mortar splatter. Clean brick and block as recommended by manufacturer.
36. Provide and install all weeps, vents and weep inserts as required.
37. It is the responsibility of this Bid Category Contractor to review all drawing notes, including architectural, structural, mechanical and electrical drawings for areas requiring work described by this bid category. Include same in bid.
38. Provide for full rainwater protection. Seal top of masonry walls to prevent water infiltration at end of each day. Cover walls at the end of each day.
39. Rake out and remove all masonry debris from exterior of building prior to landscaping.
40. Contractor will be responsible for periodic and final grading of site that is disturbed by fork truck/lull operation.
41. Coordinate sizes of electrical box cutouts and clean out cover sizes with contractors. "Oversized cut-outs not covered by cover plates or clean out covers will not be accepted". All cutouts will be level and true.
42. It is this contractor's responsibility to provide bull nose block as shown in the working documents. If the block is not available in bull nose, this contractor will provide means and methods to create a bull nose final product.
43. Clean footings of all debris, snow, ice, soil, water, dirt and mud prior to start of work.

44. Dewater as necessary for installation of all masonry below grade for work of this category.
45. This contractor is responsible to review the code plan. Seal masonry partitions up against structural steel or deck and provide safing insulation or grouting to close all penetrations through partitions, as specified. Sealing of masonry walls shall meet all fire rating codes as well as required UL rating.
46. Provide all dumpsters for masonry debris generated from work of this category.
47. The proper installation, maintenance and type of wall bracing for every wall condition are the responsibility of this contractor. Wall bracing should be installed in accordance with all MIOSHA and Masonry Institute requirements.

ALLOWANCES:

EXCLUDED FROM THIS CONTRACTORS WORK IS:

All concrete and steel work associated with other bid categories.

SPECIAL CONSIDERATIONS:

1. This contractor shall provide dumpsters and/or removal offsite of all demolition and general debris created by the work of this contractor.
2. All work under this scope shall comply with proper trade jurisdictions, even if it is necessary to assemble composite crews or subcontract to appropriate trades.
3. Provide clean-up as outlined in the general requirements section 01550.
4. Contractor is responsible to furnish all Barton Malow Co. start-up documents within two (2) weeks of contract award. This includes signed contract, bonds, certificate of insurance, shop drawings and submittals, and contractors safety program with signed safety agreement (01600), Safety Program Review checklist (01600) and MSDS.
5. It is the responsibility of the contractor to review all drawings & drawing notes, including civil, architectural, structural, mechanical, electrical drawings, and specifications. Contractor shall provide and install all materials within this bid category unless otherwise noted above as excluded from this scope of work.
6. Bidder shall complete the Bid form in its entirety, special attention is directed to the Alternates and Unit Prices Section of the Bid Form.
7. The special provisions outlined in Section 00210 Description of the Work form a part of this bid category work description and apply to this bidder's scope of work.
8. This contractor is responsible to create a safety binder which will include the following information: site specific safety program, signed safety agreement (01600), MSDS sheets, Asbestos Training Certificates, CPR/first aid certificates, Lift certifications, Lead Renovators Certificates, Storm Water Certificates, Equipment Maintenance Logs, Equipment Training Letters, Roof Work Permits, & Letter indicating competent person. This information will be organized and clearly marked with the contractors name, address and division on the exterior of a 3 ring binder for each building you will be working at.

END OF BID CATEGORY - MASONRY

BID CATEGORY 050000 – STEEL

The Work of this Bid Category includes but is not limited to providing all labor, equipment, materials, scaffolding, hoisting and incidentals to complete all in accordance with the Contract Documents and applicable codes. All Work is to be performed as shown on the plans and specified in the following Technical Specification sections:

<u>Specification Section</u>	<u>Description of Section</u>
<u>DIVISION 01 – GENERAL REQUIREMENTS</u>	All Sections
<u>DIVISION 02 – EXISTING CONDITIONS</u>	All Sections
<u>DIVISION 05 - METAL</u>	
051200	Structural Steel Framing
053100	Steel Decking
055000	Metal Fabrications

In addition to the above, this Bid Category requires adherence to and coordination with various other technical Specifications interfacing with this Work. The Bidder shall review the Work descriptions of the other Bid Categories as set forth in Section 00210 of the Project Manual and other referenced documents, so as to not misunderstand scope responsibilities.

THE SCOPE OF THIS BID CATEGORY SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING ITEMS:

1. Any opening requiring the installation of in-wall structural steel support will be the responsibility of this contractor.
2. This contractor shall provide adequate supervision of sub-contractors and field personnel. This includes a field superintendent responsible for all work with the ability to make decisions.
3. This contractor will be responsible for all re-mobilization costs for all phases of work.
4. This contractor will be responsible for all de-watering during excavations of their work.
5. This contractor shall be responsible for all layout, engineering, elevations and layout coordination with other contractors.
6. Contractor shall provide all fall protection, lifts and scaffolding as required to complete their own work. Fall Protection and scaffolding shall comply with MIOSHA, OSHA and any other authorities having jurisdiction.
7. Furnish and install loose lintels for all wall penetrations which require additional structural support. This contractor will be responsible to examine all drawings for openings requiring support steel or items requiring structural support.
8. Fabrication and installation of all structural steel framing, columns, beams, sag rods, ladders, metal decking, bracing, handrail and any other miscellaneous metals.
9. Furnish and install all loose steel lintel, shelf angles, anchor bolts, masonry anchors, bearing plates, leveling plates, sleeves, all embedment and relief angles to the appropriate trades for installation as shown on drawings.
10. Contractor shall survey all steel installed to ensure plumb and level.
11. It is the responsibility of this Bid Category to review all drawings & drawing notes, including civil, architectural, structural, mechanical, and electrical drawings, and include items requiring work that is generally defined as the responsibility of this Bid Category within the work description unless otherwise noted above in

the scope of work.

12. This contractor is responsible for proper storage and protection of steel from corrosion, deformation and other damage on site.
13. Contractor is responsible for providing steel complying with all standards listed in specifications. All new and existing steel shall be reworked as necessary to provide a complete installation. Coordination with other trades is required to determine required conditions of steel for completion of work by other trades. Contractor is responsible to provide and install steel to the conditions required for all other trades to complete work.
14. Furnish and install framing for all mechanical rooftop units and roof accessories (roof hatch, etc.) and all miscellaneous metal shown or not shown but required for a complete installation.
15. This contractor shall obtain and pay for all permits required for the work described by this bid category.
16. This contractor shall be responsible for receiving, off loading, into/onto building including the safe and secure storage of materials related to this work.
17. Contractor is responsible for shop painting and field touch-up painting for all structural steel members.
18. Contractor to provide all OSHA protection required in relation to the work of this category, including fall protection / tie off point for employees.
19. Contractor is to perform all demolition to complete their own work, as required.
20. Provide daily clean-up according to Barton Malow standards, including daily removal of all materials and debris related to this category. If daily clean-up is not performed, the Construction Manager will provide his labor to complete the clean-up and the appropriate contractor will be back charged.
21. Contractor is responsible for coordination with other trades, including mandatory participation in job meetings.
22. Provide layout to the mason & concrete foundation contractors for the installation of anchor bolts, bearing plates and location for RTU structural framing.
23. It is the responsibility of this contractor to ensure all roof penetrations where structural steel is installed are water tight.
24. All material generated by this trade is to be legally disposed of by this contractor.
25. Contractor is responsible for remobilization costs for all phases of work.
26. This contractor shall include all overtime and shift time necessary to complete the work within the project schedule. Crew sizes shall be dependent on available work. Contractor will be required to work in multiple areas simultaneously and concurrently.
27. This contractor is to provide all legal disposal off-site of the debris that is a result of their work.
28. Coordinate the location and sizes of all openings with the appropriate trades.
29. Furnish, install and maintain all shoring and bracing as required. Leave shoring in place until new building systems are in place and then remove as required. Prior to installation of shoring and bracing efforts, provide shop drawings on the proposed shoring and bracing design. A registered engineer in the State of Michigan must seal drawings.
30. Fabrication and installation of all structural steel framing, columns, beams, girts, sag rods, joists and girders, metal decking, bracing, connections, steel tube framing, roof ladders, staircases, pipe railings, temporary bracing and erection materials (as required), miscellaneous support steel and miscellaneous iron, as specified. Perform all work in accordance with all contract document notes, sections, details and column key plans. This contractor is responsible to review the extent of the work under this category and include any necessary, relocation and/or replacement of existing items to complete work. Field fabrication to meet existing conditions may be required.

31. Furnish masonry contractor with detailed drawings, diagrams, instructions, directions and templates for layout of all bearing plates and other embedded items. Including elevations of plates. Field layout and field coordination of elevations to be supplied to Masonry Contractor includes mandatory field meetings with the Masonry Contractor at their request and drawings. Provide waterproof, legible piece marks on all steel that coordinates with the drawings.
32. Field check anchor bolts for line and level two weeks prior to erection of steel. Report any discrepancies to Barton Malow immediately. Contractor is responsible to remove all water, mud, and dirt off of footings to allow for the installation of steel. Contractor is responsible to provide their own materials and crane staging area is required.
33. This contractor is responsible for proper storage and protection of steel from corrosion, deformation and other damage on site. Clean all, mud and dirt off of structural steel at the completion of the job.
34. Weld all miscellaneous steel and embedment required by other trades.
35. Furnish and install angle framing and decking closures for all roof penetrations including ductwork, exhaust fans, roof hatches, shown to be removed by the demo contractor.
36. Include cleaning and touch up painting of bolted connections, welded connections, and abraded areas. After erection, field coat all abrasions, nuts and bolts, washers and surfaces left unpainted. Shop painting and field touch-up painting for structural steel members. Contractor to note special attention will be paid to quality of detail work in exposed areas.
37. Reinforce existing structural steel as shown or required for installation of new work. It is this contractor's responsibility to review all structural, architectural and mechanical drawings. Remove, patch and/or replace any ceiling systems as required to perform work of this category.
38. Verify all elevations, grades, etc., prior to installation, necessary to complete this scope of work and provide Barton Malow Company a copy of the report.
39. Furnish and install roof drain pans and associated framing.
40. Supply and install all handrails and guardrails shown on the drawings, included the architectural and civil drawings.
41. This contractor is responsible for steel beams to be installed at Troy High School per bid documents.

SPECIAL CONSIDERATIONS:

1. This contractor shall provide dumpsters and/or removal offsite of all demolition and general debris created by the work of this contractor.
2. All work under this scope shall comply with proper trade jurisdictions, even if it is necessary to assemble composite crews or subcontract to appropriate trades.
3. Provide clean-up as outlined in the general requirements section 01550.
4. Contractor is responsible to furnish all Barton Malow Co. start-up documents within two (2) weeks of contract award. This includes signed contract, bonds, certificate of insurance, shop drawings and submittals, and contractors safety program with signed safety agreement (01600), Safety Program Review checklist (01600) and MSDS.

5. It is the responsibility of the contractor to review all drawings & drawing notes, including civil, architectural, structural, mechanical, electrical drawings, and specifications. Contractor shall provide and install all materials within this bid category unless otherwise noted above as excluded from this scope of work.
6. Bidder shall complete the Bid form in its entirety, special attention is directed to the Alternates and Unit Prices Section of the Bid Form.
7. The special provisions outlined in Section 00210 Description of the Work form a part of this bid category work description and apply to this bidder's scope of work.
8. This contractor is responsible to create a safety binder which will include the following information: site specific safety program, signed safety agreement (01600), MSDS sheets, Asbestos Training Certificates, CPR/first aid certificates, Lift certifications, Lead Renovators Certificates, Storm Water Certificates, Equipment Maintenance Logs, Equipment Training Letters, Roof Work Permits, & Letter indicating competent person. This information will be organized and clearly marked with the contractors name, address and division on the exterior of a 3 ring binder for each building you will be working at.

END OF BID CATEGORY - STEEL

BID CATEGORY 060000 – GENERAL TRADES/CARPENTRY

In addition to the above, this Bid Category requires adherence to and coordination with various other technical Specifications interfacing with this Work. The Bidder shall review the Work descriptions of the other Bid Categories as set forth in Section 00210 of the Project Manual and other referenced documents so as to not misunderstand scope responsibilities.

<u>Specification Section</u>	<u>Description of Section</u>
<u>DIVISION 01 – GENERAL REQUIREMENTS</u>	
	All Sections
<u>DIVISION 2 – EXISTING CONDITIONS</u>	
024120	Selective Demolition, for reference
<u>DIVISION 05 - METALS</u>	
054000	Cold Formed Metal Framing
<u>DIVISION 06 – WOOD, PLASTICS, AND COMPOSITES</u>	
061000	Rough Carpentry
064023	Interior Architectural Woodwork
<u>DIVISION 07 – THERMAL AND MOISTURE PROTECTION</u>	
072100	Building Insulation
078413	Firestopping
079200	Joint Sealants
<u>DIVISION 08 – OPENINGS</u>	
081113	Standard Steel Doors & Frames
082250	FRP Doors and Aluminum Frames for FRP Doors
088000	Glazing
087100	Door Hardware
089000	Louvers & Vents
<u>DIVISION 09 - FINISHES</u>	
095113	Acoustical Ceilings
099100	Painting

In addition to the above, this bid category includes but is not limited to the Bidding Documents, the Bidding and Contract requirements and Division 1 General Requirements of the Project Manual and various other Technical Specifications interfacing with this work. The bidder is advised to review the work descriptions of the other categories and other referenced documents so as to not misunderstand scope responsibilities.

THE SCOPE OF THIS BID CATEGORY SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING ITEMS:

1. Each category shall be responsible for items of work as described in Section 00210 Descriptions of Work/Special Provisions/Requirements.

2. This contractor shall be responsible for all layout, engineering, elevations and layout coordination with other contractors. It is the responsibility of this contractor to layout all work of this category from established control lines. Upon completion of the work, furnish signed and sealed as-builts that tie all site improvements to property lines and/or building corners and meet the requirements of Section 01700 of the Project Manual.
3. Provide all hollow metal frames and doors. Install all hollow metal frames that are in gypsum assembly systems. Verify hollow metal frames are plumb and set in masonry (masonry contractor to set frames). Notify Barton Malow Company if there is a problem, so it can be corrected in a timely manner prior to finishes.
4. Provide and Install doors with preinstalled hardware into hollow metal frames. See hardware schedule for proper hardware package. Adjust and shim doors for proper swing and closure.
5. Verify plumbness of hollow metal frames set in masonry. Notify Barton Malow Company if there is a problem, so it can be corrected in a timely manner prior to finishes. Adjust and shim doors for proper swing and closure.
6. Perform all troubleshooting, adjustments and corrections of hardware problems after Owner occupancy for the duration of the warranty period.
7. Furnish and install complete assemblies for all interior and exterior walls, drywall, metal studs, ceilings, acoustical panels, soffits, framing and furring, hangers, insulation, and sheeting. Architectural joint systems, control joints, and all accessories, as specified.
8. Provide and install all wood nailers as indicated within the working documents. This includes all wood work shown at the roof curbs and parapet walls.
9. Provide all wood blocking/plywood or reinforcing as shown in the details and drawings (pay special attention to cabinet layout).
10. Provide within a submittal the cold form member and connection calculations as required.
11. Provide appropriate beads at all gypsum transitions and endings, as required. This contractor is responsible for providing final wall construction to meet code requirements.
12. Provide and install complete cold-formed metal framing system (interior) including design and engineering, as specified.
13. Install all access panels for proper access to equipment and devices of other trades in new gypsum and/or plaster construction. Access panels required by other trade contractors, whether shown or not shown, will be furnished by same and installed by this contractor.
14. This contractor is responsible for preparing surfaces to a degree ready for acceptance for final treatment/painting by others.
15. Contractor to provide and install spray foam insulation as shown or required at gaps at top of stud framing and metal decking.
16. Provide fire stopping as necessary to seal wall, floor and ceiling penetrations created for work under this bid category. Note: Fire stopping must adhere to all building codes and State Fire Marshall requirements.
17. Provide all scaffolding, hoisting and rigging equipment required for the completion of work related to this category.
18. This contractor will be responsible for all re-mobilization costs for all phases of work.
19. Include all temp walls in base bid pricing, see A0.1B for temp wall locations.
20. It is the responsibility of this Bid Category to review all drawings & drawing notes, including civil, architectural, structural, mechanical, and electrical drawings, and include items requiring work that is generally defined as the responsibility of this Bid Category within the work description unless otherwise noted above in the scope of work.

21. This contractor will be responsible for all re-mobilization costs for all phases of work.
22. Division 061000 Carpentry will provide and install all wood blocking, sheathing, nailers and rough carpentry shown. Any additional shimming or blocking not shown but required for the installation of new materials will be the responsibility of this contractor.
23. Coordinate the location and sizes of all openings, wood nailers, sheathing and blocking as shown with the appropriate trades. Rework required for the lack of coordination will be the responsibility of this contractor.
24. This contractor shall be responsible for receiving, off loading, hoisting into/onto building including the safe and secure storage of materials related to this work.
25. Provide all hollow metal doors, frames, finish hardware and related items as required. Hardware to be factory installed. Contractor shall include all costs for the manufacturer's rep to perform factory commissioning, develop deficiency list and make all necessary corrections per the manufacturer's rep. This shall take place prior to Owner occupancy.
26. Contractor will be responsible for delivery and off-loading of all hollow metal frames at the site and will need to verify correct quantity of frames on shipper with the Barton Malow site superintendent. Contractor to include all cost to deliver and store all doors, frames and hardware on-site. Contractor shall use owner's on-site adjacent auditorium facility. Contractor will be responsible for storing all doors and frames in an acceptable manner with Barton Malow and Architect.
27. Supply and install cylinders capable of receiving the cores which match the owner's keying system. Contractor to coordinate with owner key/core supplier. This contractor will provide and install ALL cores including at aluminum and FRP entrances.
28. Remove tags and clean all surfaces after new doors and panels are installed.
29. Provide and solid grout bed all thresholds.
30. Furnish and install complete acoustical ceilings, and control joints, including all accessories.
31. Furnish and install all architectural louvers noted on the bid documents and specs.
32. Include FRP frame and doors, glazing, hardware, etc. in scope of work.
33. Include all louvers noted on plans.
34. Include metal siding, Z-girts, exterior wall components, except masonry. Reference Detail 8 on Sheet A5.1.
35. Furnish and install complete aluminum entrances, aluminum curtain walls, windows, sunscreens & related hardware, flush aluminum FRP doors/aluminum frames, door sweeps for a weather tight seal and glass including but not limited to all glazing, sealers, caulking and aluminum framing. Furnish and install all aluminum sills and break metal trim, interior and exterior.
36. Supply and install all glass and glazing required for this project in all doors (including, but not limited to FRP doors and aluminum doors), hollow metal doors, pre-finished wood doors, sidelights and aluminum windows, and as specified.
37. Furnish and install all finish hardware, cylinders, thresholds, final keying for Aluminum and FRP doors. Final keying cost to be included in your bid. Coordinate construction cores and final keying with Barton Malow / Owner.
38. Contractor to provide plywood enclosure to the building at the end of each day if opening is not completely reinstalled. All opening are to be secured at the end of each work day.
39. Furnish and install all interior and exterior caulking, of new doors, panels, glass, and window systems to

provide for a complete weather tight system. All caulking must be performed by a qualified caulker or hire outside company to complete work.

40. Remove tags and final clean all surfaces properly, after new doors, glass, panels and window systems are installed.
41. All aluminum frames and doors to be factory finished, as specified.
42. Window stops shall be set to the inside of the building and the inside of all rooms.
43. Any openings not fully completed by the end of each work day must have temporary measures installed to ensure the building can be secured.
44. This contractor is responsible for protecting aluminum doors/frames and finish hardware until such items are installed
45. Furnish and install aluminum doors, aluminum frames and finish hardware. Aluminum frames in new masonry to be furnished and installed by this contractor. Please refer to frame details on installation into existing masonry openings.
46. Provide daily cleanup according to Barton Malow standards, including daily removal of all materials and debris related to this category.
47. Each contractor, while on site shall provide to Barton Malow one (1) person for each five tradesmen (or portion thereof) employed at the site, one day a week for up to four (4) hours , for the exclusive purpose of performing overall project weekly cleanup.
48. Coordination with other trades, including mandatory participation in job meetings.
49. It is this contractor's responsibility to provide full fall protection per Barton Malow requirements. Any workers found deficient will be permanently removed from the jobsite.
50. Contractor must submit the training cards for the competent person to be trained in CPR, First Aid, Asbestos Awareness, Lead Renovator, and any other certifications required by the trade and area of work.
51. Project Safety – The following bullet points are requirements of all workers and anyone visiting this project, in addition to all other Barton Malow safety requirements. All costs associated with the purchase of these items must be included as part of your bid and must be worn at all time while on this project.
52. High visibility clothing must be worn at all times inside and outside. This can be a tee shirt, vest, coat or any other article of clothing that will allow for each worker to be easily noticed.
53. Hard hats and safety glasses must be worn at all times.
54. Protective gloves similar to the Workeasy WE300.
55. All contractors shall go through Barton Malow's safety orientation (safety video).
56. Any and all time tickets are to be signed by the Construction Manager and submitted on a daily basis. No time tickets will be accepted unendorsed. Allowance, when billed, shall be exclusive of mark-ups and fees. Any money not used at the end of the project will be deducted from the contract.
57. Demolition of all exterior glazing, framing, and storefront is work of this bid category. Only demo window openings that can be replaced in the same day. Demo shall include all accessories and sealants complete. Include temporary panels in frames until glazing is in place.
58. Demo of entrance doors and frames are to be coordinated with the security contractor.
59. Any cutting and patching required for installation of new work shown or not shown on the contract documents for work of this bid category.

60. Furnish and install all aluminum doors, storefront, glazing, mullions, thresholds, hardware, fillers, drip edge, trim, and all other components necessary for a complete installation as shown or as required.
61. Furnish and install all blocking and shims shown as required.
62. Furnish and install all hardware for aluminum doors and storefront systems. Furnish and install automatic door operator. All low voltage wiring shall be provided and installed for door hardware for work of this bid category. Line power connection will be by the electrical contractor.
63. Coordinate raceway in aluminum framing with the electrical contractor.
64. Furnish and install glazing in wood/hollow metal doors provided by the architectural contractor.
65. Furnish and install all fire rated glass in hollow metal frames as specified.
66. Install joint sealant where work of this bid category needs dissimilar materials as shown or specified. Verify exterior joint width and include in base bid. Complete a sample for approval before proceeding with joint sealants.
67. All adjusting and cleaning shall be performed as specified.
68. Provide a final cleaning of new interior and exterior glazing & aluminum framing at the direction of the construction manager.
69. All ceiling removal & replacement not shown but is required for work identified by this category will be the responsibility of this contractor.
70. Complete hardware manufacturer's adjustment and inspections as specified.
71. In addition to a contractors one year warranty on parts and labor, submit all extended warranties called out in the specifications.
72. All hardware called for on existing doors shall be provided and installed this aluminum / FRP door contractor.
73. All extras must be submitted within 60 days, or cost will be voided.
74. Review abatement documents and schedule, many of the windows have abatement. This contractors is responsible to coordinate work with abatement contractor's schedule.
75. Participation in a meeting with the district locksmith will be scheduled to coordinate hardware removal, cylinders, keying, etc.
76. Provide and install paint for all interior surfaces, exterior surfaces, exterior lintels, concrete floors, mechanical lines fire protection lines, and duct work, as required, including epoxy painting work. Gas lines shall be painted yellow, per code.
77. This contractor is responsible to investigate the completed surfaces of all walls, ceilings, soffits, etc., of drywall, masonry and other construction to determine and approve finishes established by those trades to which all work of this category applies. Prepare all surfaces to receive paint as specified, including all minor repairs.
78. Contractor is responsible for removing or covering all cover plates, trim pieces, etc., necessary for the performance of their work if directed by the appropriate trade and replacing same at the conclusion of this Contractor's work.

79. Contractor is responsible for selective touch-up of finish work per the Architect and Construction Manager.
80. Contractor is responsible for all touch-up of door frames after installation of doors and glass.
81. The contractor is responsible to protect all floors from overspray to the approval of the Construction Manager.
82. This contractor is responsible to paint all new, exterior, exposed piping, including the new gas line on the roof.
83. Provide all necessary information, color samples and finish samples, and cooperate with the Project Architect in the development of the colors and finishes.

ALLOWANCES:

1. Include a \$25,000 allowance to be used as directed by BMC.

SPECIAL REQUIREMENTS:

1. Project Safety – The following bullet points are requirements of all workers and anyone visiting this project, in addition to all other Barton Malow safety requirements as defined in the project manual. All costs associated with the purchase and implementation of all safety requirements must be included as part of your bid:
 - Provide each worker within this category with a hardhat (newer than 5 years old), safety glasses, reflective safety attire, work gloves, and other PPE required to perform job per the Barton Malow safety requirements. This is required at all times while working onsite. Failure to provide will result in removal of worker from site. Please review Barton Malow safety manual for specifics.
 - Each person working on site shall review the BMC safety orientation video before beginning work. Each contractor shall submit documentation that all of their employees have viewed the video.
 - It is this contractor's responsibility to provide full fall protection per Barton Malow requirements. Any workers found deficient will be permanently removed from the jobsite
 - Provide guardrails per the OSHA height requirements on all scaffolds used by this bid category. This includes top, mid and toe board rails. Also, all accessories required by the scaffold manufacture for a complete scaffold erection must be used at all times. A competent person must supervise the installation of scaffold built on site. Failure to complete these guidelines could result in removal of workers from site.
 - All contractors are to take part in Barton Malow's stretch and flex program daily and turn a sign in sheet with daily report with those who participated in the program. Please review the Barton Malow safety manual for specifics.
 - All contractors must provide a person who is trained and certified in working around lead materials. This "certified lead renovator" must be on site when all demolition is occurring or when lead materials are effected by construction. Proof of training and a certificate must be provided to Barton Malow during submittal phase confirming the training of the individual. The contractor must also meet all new Federal, OSHA, MIOSHA, and DEQ requirements regarding lead.
2. All contractors must submit the training cards for the competent person to be trained in CPR, First Aid, Asbestos Awareness, Lead Renovator, and any other certifications required by the trade and area of work.

3. Contractor, as well as, employees must be Certified Lead Renovators as required by the EPA effective April 22, 2010.
4. All contractors are to provide daily clean-up according to Barton Malow standards, including daily removal of all materials and debris related to this category. If daily clean-up is not performed, the Construction manager will provide a laborer to complete the clean-up and the appropriate contractor will be back charged.
5. It is the responsibility of this Bid Category to review all drawings and drawing notes, including civil, architectural, structural, mechanical and electrical drawings, and include items requiring work that is generally defined as the responsibility of this Bid Category within the work description.
6. Bidder shall complete the Bid Proposal form in its entirety. Special attention is directed to the Alternates and Unit Prices Section of this form.
7. This Bidder is required to submit alternate prices identified in the bidding documents that pertain to their work. These alternate prices must be separate from their base bid on the bid proposal form as described in Section 00200, Instruction to Bidders.
8. The special provisions outlined in Section 00210, Description of the Work, form a part of this Bid Category work description and apply to this bidder's scope of work.
9. All contractors are required to meet the schedule as outlined in Section 00230 Schedule and Phasing. All contractors' bids must account for any overtime necessary to meet the schedule.
10. If contractor is behind schedule and is notified by Barton Malow Company, the contractor shall be required to accelerate the work at its own expense. The contractor shall employ such means as overtime work, multiple work shifts, and additional equipment, and shall continue to do so until the progress of the work, in the opinion of Barton Malow, is in conformance with the project construction schedule.
11. All work under this scope shall comply with proper trade jurisdictions, even if it is necessary to assemble composite crews or subcontract to appropriate trades.
12. All contractors are required to coordinate with other trades, including mandatory participation in job meetings.
13. Contractor is responsible to furnish all Barton Malow Company start-up documents within two (2) weeks of contract award. This includes signed contract, bonds, certificate of insurance with **CG 20 10 01 85** AND **CG 20 37 10 01 endorsements**, schedule of values, contact list, signature list, sub/supplier list, site specific safety program, MSDS's, and the Barton Malow Company Safety Certificate (section 01600). The submittal register will be issued at award of contract and the due date of the submittals will be provided at that time. Each contractor and office engineer is to attend a Construction Kick-Off Meeting and Pre-Construction Meetings.

ALTERNATES:**UNIT PRICING:**

Provide unit prices as noted on the Section 00400 Bid Proposal Form.

END OF BID CATEGORY – GENERAL TRADES CARPENTRY

BID CATEGORY 075000 - ROOFING

In addition to the above, this Bid Category requires adherence to and coordination with various other technical Specifications interfacing with this Work. The Bidder shall review the Work descriptions of the other Bid Categories as set forth in Section 00210 of the Project Manual and other referenced documents so as to not misunderstand scope responsibilities.

Specification Section

Description of Section

DIVISION 01 – GENERAL REQUIREMENTS

All Sections

DIVISION 02 – EXISTING CONDITIONS

All Sections

DIVISION 07 – THERMAL AND MOISTURE PROTECTION

074213	Metal Wall Panels
075210	Built-up Roofing
075323	EPDM Single-Ply Membrane Roofing
076200	Sheet Metal Flashing & Trim
077100	Manufactured Roof Specialties

In addition to the above, this bid category includes but is not limited to the Bidding Documents, the Bidding and Contract requirements and Division 1 General Requirements of the Project Manual and various other Technical Specifications interfacing with this work. The bidder is advised to review the work descriptions of the other categories and other referenced documents so as to not misunderstand scope responsibilities.

THE SCOPE OF THIS BID CATEGORY SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING ITEMS:

1. It is the responsibility of this Bid Category to review all drawings & drawing notes, including civil, architectural, structural, mechanical, and electrical drawings, and include items requiring work that is generally defined as the responsibility of this Bid Category within the work description unless otherwise noted above in the scope of work.
2. This contractor will be responsible for all re-mobilization costs for all phases of work.
3. This contractor is to provide all legal disposal off-site of the debris that is a result of their work.
4. Coordinate the location and sizes of all openings with the appropriate trades.
5. This contractor shall be responsible for receiving, off loading, hoisting into/onto building including the safe and secure storage of materials related to this work.
6. Provide all membrane roofing systems complete, as specified.
9. This contractor will provide positive water seals throughout the entire construction period, so as not to allow damage to new or existing construction. If water or any other type of damages occur due to elements entering through any roof opening it will be this contractors responsibility to bare the cost of

the repair or replacement to the damaged construction.

10. Properly clean roof deck of all debris, snow, etc., before installation of roofing materials, as specified.
11. This contractor shall qualify his proposals as to any unsatisfactory conditions. Starting work implies complete acceptance of existing surfaces to be roofed.
12. This contractor shall accomplish all work in strict compliance with the roofing material manufacturer's published specifications submitted to and approved by the owner and shall follow the best trade practices to achieve a complete water-tight roofing and flashing installation.
13. All roofing work shall be performed by trained and qualified personnel only.
14. No material shall be applied when water in any form such as rain, snow, dew, ice or frost is present on the substrate of roofing surfaces.
15. Install and flash in all roof curbs provided by categories 11400, 15050, and 16050 refer to structural, mechanical and electrical plans for locations and sizes of roof openings. This contractor shall create the complete opening (cutting thru but not limited to roofing materials, decking, gyp, etc) in both new and existing roofs.
16. The contractor is responsible to cap new curbs and make water-tight until new mechanical units are installed.
17. This contractor shall include all winter conditions and winter protection.
18. Include within base bid all cost to complete all tie-in work as may be required. The contractor shall maintain the integrity of the warranty on the existing roof system.
19. Properly clean roof deck and existing roof membrane of all debris, ice, snow, etc., before installation of roofing materials. No material shall be applied when water in any form such as rain, snow, dew, ice or frost is present on the substrate of roofing surfaces.
20. The roofing contractor shall notify the construction manager immediately of any unsatisfactory conditions, including any structural concerns. Starting work implies complete acceptance of existing surfaces to be roofed.
21. The roofing contractor shall accomplish all work in strict compliance with the roofing material manufacturer's published specifications submitted to and approved by the owner and shall follow the best trade practices to achieve a complete water-tight roofing and flashing installation. Do not deviate from the manufactures installation specifications. Notify Barton Malow immediately if the manufactures specifications conflict with the construction documents.
22. All roofing work shall be performed by trained and qualified personnel only with all safety requirements meeting MIOSHA and Barton Malow standards, specifically the Barton Malow 6'-0" fall protection requirement.
23. Provide all flashing terminations behind work of other trades and at existing conditions.
24. Coordinate all sheet metal flashing, trim, accessories, colors and details with existing conditions as specified and with the Architect. Colors shall match and be of similar coating systems as specified.
25. This contractor is responsible for all roof copings.
26. Coordinate the location and sizes of all openings with the appropriate trades.

27. This contractor is to provide all dumpsters and legal disposal off-site of the debris that is a result of their work.
28. This contractor will install the warning line system/control access zone on the flat section of the roof where new work is being performed to meet roofing warning line system/control access zone MIOSHA requirements for the use of all contractors that have to perform work on the roof. Each contractor is responsible for the maintenance and inspection of the warning line system as required during work of their category. Replacement of portions of the warning line will be the responsibility of the Roofing contractor. If there are small separate areas where work is to be performed on the roof, this contractor is to provide additional stations and warning line that can be put up by those trades working in these areas.
29. Restore all disturbed areas created by this work category. This includes leveling ground, topsoil, seed, and secured straw blanket.
30. This contractor shall include all overtime and shift time necessary to complete the work within the project schedule. Crew sizes shall be dependent on available work. Contractor will be required to work in multiple areas simultaneously and concurrently.
31. Provide and install a complete watertight, positive draining roof system, including EDPM roof system, adhesives, ridged insulation, attachment to deck, underlayment, cants, shims, saddles, tapers, angle iron, preformed expansion materials, flashings, cap flashing, drip edges, 4" neoprene bellows expansion joint covers, walk way pads, blanket insulation, sealant, valleys, membrane, roofing felts, counter flashing, stepped flashings, ridding, cleats and the like.
32. Furnish and install all sheet metal work, metal soffit and fascia, exterior metal wall panels as required for a watertight roof, including but not limited to plastic cement, counter flashings, parapet copings, gravel stops, hold down cleats, metal caps, flashing of all roof curbs and roof drains installed by others and flashing/sealing of all roofing penetrations required by other trades. Furnish and install all furring and framing materials required for soffit and fascia.
33. This contractor will provide positive water seals throughout the entire construction period, so as not to allow damage to new or existing construction. If water or any other type of damages occur due to elements entering through any roof opening it will be this contractor's responsibility to bare the cost of the repair or replacement to the damaged construction.
34. Provide and install the pre-finished metal panel system complete.
35. Provide and install the pre-finished metal coping system complete.
36. Provide and install gutters and downspouts systems complete.
37. Provide and install all roof hatches complete.
38. Provide and install all flashings for roof top curbs and roof penetrations necessary to accommodate items such as stacks, vents, roof sumps, rain conductors, exhaust fans, intake louvers and the like. Confirm the size and placement with Mechanical Contractor. Coordinate openings with all trades and flash/seal weather-tight.
39. Provide and install all through wall scuppers as shown in the working documents.

EXCLUDED FROM THIS CONTRACTOR'S WORK IS:

1. None

SPECIAL CONSIDERATIONS:

1. No deliveries will be accepted in or out of the construction site during the hours of 7:30am – 8:30am

and 3:00pm – 4:00pm

2. Provide adequate supervision of your sub-contractors and your field personnel. This includes a field superintendent responsible for all work with the ability to make decisions.
3. Every contractor performing Demolition of any type must provide a person who is trained and certified in lead renovation. This “certified lead renovator” must be on site at all when demolition work is occurring. The contractor must also meet all new OSHA, MOSHA, and DEQ requirements regarding lead. Contractors will be required to supply their firm’s name and copy of the certifications of the “Certified Lead Renovator” card as well as a copy of their firm’s certifications as a startup document. All other photo documentation requirements as required under the regulation will be required to be provided during the “closeout” phase of construction (as well as a copy maintained by the contractors for 3 years after date of substantial completion). The contractors will be required to post a notification packet in the buildings notifying all occupants of the upcoming renovations. Please visit the EPA’s website www.EPA.gov/lead for more information.
4. All contractors to provide all dumpsters and spoil / trash removal as required for the performance of their work. All material to be sent to a certified trash collection or recycling facility.

END OF BID CATEGORY – ROOFING

BID CATEGORY 23 00 00 – MECHANICAL

The work of this bid category includes but is not limited to providing all labor, equipment, materials, scaffolding, hoisting and incidentals to complete all the **Mechanical** in accordance with the specifications, drawings and applicable codes. All work is to be performed as shown on the plans and specified in the following technical specification sections:

<u>Specification Section</u>	<u>Description of Section</u>
<u>DIVISION 01 – GENERAL REQUIREMENTS - ALL</u>	
<u>DIVISION 02 – EXISTING CONDITIONS</u>	
024120	Selective Demolition
<u>DIVISION 03 – CONCRETE</u>	
033000	Cast-In-Place Concrete
<u>DIVISION 05 - METALS</u>	
055000	Metal Fabrications
<u>DIVISION 07 – THERMAL AND MOISTURE PROTECTION</u>	
078413	Firestopping
079200	Joint Sealants
<u>DIVISION 20 – COMMON MECHANICAL REQUIREMENTS - ALL</u>	
<u>DIVISION 22 – PLUMBING - ALL</u>	
<u>DIVISION 23 – HEATING VENTILATING AND AIR CONDITIONING – ALL</u>	

In addition to the above, this bid category includes but is not limited to the Bidding Documents, the Bidding and Contract requirements and Division 1 General Requirements of the Project Manual and various other Technical Specifications interfacing with this work. The bidder is advised to review the work descriptions of the other categories and other referenced documents so as to not misunderstand scope responsibilities.

THE SCOPE OF THIS BID CATEGORY SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING ITEMS:

1. It is the responsibility of this Bid Category to review all drawings & drawing notes, including civil, architectural, structural, mechanical, and electrical drawings, and include items requiring work that is generally defined as the responsibility of this Bid Category within the work description unless otherwise noted above in the scope of work.
2. Each category shall be responsible for items of work as described in Section 00210 Descriptions of Work/Special Provisions/Requirements.
3. This contractor to review the scope of work for bid category 16000, division 16 Electrical, for work related to this bid category. If there is any confusion to the scope of work for each related bid category, this contractor shall submit a pre-bid RFI, or clarify on the proposal form the point of confusion, and clarify what work has not been included in the bid. This contractor will coordinate with the work of bid category 16000 contractor in the areas of wiring mechanical equipment, valve alarm flow switches, duct detectors, control wiring for

mechanical equipment, etc. and should thoroughly familiarize themselves with the electrical requirements relative to the bid category 16000 work.

4. Review the electrical specifications and provide any electrical equipment required for mechanical equipment which is required for a complete installation, but not shown. The electrical contractor will be responsible for a single point connection to mechanical equipment.
5. This contractor will be responsible for all re-mobilization costs for all phases of work.
6. This contractor shall be responsible for receiving, off-loading, hoisting into/onto building including the safe and secure storage of materials related to this work.
7. This contractor is to provide all legal disposal off-site of the debris that is a result of their work.
8. Coordinate the location and sizes of all openings with the appropriate trades.
9. Furnish and install pipe identification markers, tags, schedules, nameplates to identify ducts, pipes and mechanical equipment.
10. Before sawcutting or making any cuts in the floor, all contractors must use ground penetrating radar, and must provide proof that it was used, to the Barton Malow site superintendent.
11. Furnish, install and maintain all shoring and bracing as required. Leave shoring in place until new building systems are in place and then remove as required. Prior to installation of shoring and bracing efforts, provide shop drawings on the proposed shoring and bracing design. A registered engineer in the State of Michigan must seal drawings.
12. Perform all trimming and adjusting of demolition work for installation of new construction. Coordinate limits of wall demolition with architectural drawings and all critical trade contractors.
13. In all locations where this contractor sawcuts the floor, this same contractor is also responsible for pouring back concrete. This contractor must coordinate with flooring contractor as to provide proper floor finish and height.
14. For the duration of your work, all building systems must remain operational and there shall be no interruption to the owner's systems while they are occupying the building. Coordinate and schedule shut-downs as required for this contractor's work during off-hours.
15. Include shutting off main water line, heating systems, and draining down systems complete in base bid. Perform this work on weekends not to interfere with owner's operations or other trade activities. DO NOT assume that any branch shutoffs in base bid are existing.
16. Contractor is responsible for removal of all spoils resulting from their work from the site.
17. The first floor sub-grade will be placed and compacted prior to the start of the underground work designated in this package. This contractor is responsible to excavate, install work and replace all fill to the specified density material within the building interior to the same condition it was prior to starting excavation for underground. Remove spoils from site.
18. Provide piping and connections to all site utilities, as shown. This contractor is responsible to terminate connections 5 feet outside of building. Contractor is responsible for all excavation, backfill and compaction for their work. All backfill must be Class II granular fill. Coordinate connections with Category 320000.
19. This contractor is to verify and stake locations of all underground utilities before beginning their work.

20. Coordinate with Architect/Engineer before penetrating any structural members.
21. Furnish and install all new louvers including architectural louvers, as specified. Outside air louvers are to be electrostatic painted by this contractor. Coordinate with all other trades for the location and size of all openings for louvers.
22. This contractor is responsible for covering and securing, water-tight, all existing curbs on roofs that are to be removed and any of their own new through-floor or roof penetrations.
23. In rooms where existing ceiling is not scheduled to be removed and replaced, this contractor will be responsible for removal and replacement of ceiling tile as required to perform their work.
24. Provide and locate all access doors to architectural trades for setting as required for access to mechanical equipment.
25. Provide and locate all roof curbs or penetrations for mechanical equipment. Contractor will level all curbs, as specified. If roof curbs are not onsite at the time the roof is being installed, this contractor will be responsible for any additional charges incurred by the roofing contractor to flash in said units.
26. Contractor shall include all piping/pumps necessary to facilitate condensation removal at the cooling units. When not shown, contractor is responsible to route to nearest drain source.
27. This contractor will be responsible for cutting and patching of roof membrane as required to set or install new mechanical equipment. This work is to be performed by a manufacturer approved roofing contractor. Roof patching must not void any new or existing roof warranties.
28. Ceiling removal & replacement not shown but is required for work identified by this category will be the responsibility of this contractor.
29. This contractor is responsible for all sheet metal work, piping, and mechanical equipment required for the complete heating and cooling systems including but not limited to: AHU's, chiller, EF's, grilles, diffusers, pumps, valves, and unit heaters.
30. Furnish and install all mechanical, plumbing, sanitary, water, fixtures, heating/cooling, mechanical insulation, HVAC, etc systems and all mechanical demolition/repair/replacement/rough-in as detailed or specified, include legal disposal of equipment and piping removed by this contractor.
31. Pressure test all underground pipes as required in the specifications and plumbing codes.
32. This contractor is responsible for all new work on existing systems; removal and relocation of existing fixtures, equipment, and mechanical lines; and to tie-in all new mechanical work with the existing systems, as shown and required. This contractor is responsible for protection of all existing mechanical equipment and systems to remain.
33. This contractor shall include all demolition required to facilitate new and/or existing mechanical/ plumbing work. Include patching to match adjacent surfaces. The following are examples that could, but shall not be considered a complete scope of demolition, patching, matching and/or replacement of existing finishes, however required to facilitate new or existing mechanical/plumbing work:
 - a. Concrete Removal and Replacement
 - b. Masonry Removal and Replacement
 - c. Drywall Removal and Replacement
 - d. Ceiling Removal and Replacement

- e. Floor Removal and Replacement
 - f. Floor Finishes, i.e.; Carpet, VCT, Terrazzo
34. This contractor will be required to direct all related trades as to locations and sizes of penetrations to surfaces. If proper coordination is not provided it will be the responsibility of this contractor to cut, patch and revise all holes and penetrations for the installation of all pipe and ductwork. All penetrations through walls, floors, and ceilings will be fire and smoke stopped so as to comply with the Office of Fire Safety requirements.
 35. This contractor is responsible for cutting any required openings in the metal deck as required for their. Openings shall be kept protected and water-tight.
 36. Prior to final acceptance this contractor shall clean all floor drains and associated piping and remove all dirt and debris. Test with running water for good draining after cleaning.
 37. Provide protection of equipment. Costs incurred due to damage of equipment because of lack of adequate protection will be the responsibility of this contractor. This includes temporarily capping all floor drains and pipes so as to prevent concrete and other construction debris from entering the plumbing.
 38. Coordinate layout and installation of all mechanical piping and ductwork with other trades. This contractor is responsible for the proper location and sizes of all mechanical openings by other trades. Any corrective work necessary to wall or floor openings will be the responsibility of this contractor.
 39. This contractor shall field verify all dimensions and furnish dimensional layout drawings.
 40. This contractor shall include the new louvers, wall sleeves, wall boxes, splitter plates, seals, sills, blocking, backing, and shims required to complete the unit ventilator installations. Modify existing piping and or wall box as shown. Blank off unused section of louver.
 41. This contractor shall be responsible for layout engineering, and ongoing clean up as it pertains to this work, coordinate layout with other contractors.
 42. This contractor is to furnish duct-work coordination drawings to all related trades prior to their work commencing.
 43. Provide all concrete equipment pads, platforms and bases required to include extending existing for mechanical equipment and systems.
 44. This contractor is responsible for the insulation of all mechanical and plumbing systems (pipes, fittings, duct, etc) as required and specified.
 45. Provide roof drains and downspouts as required. Coordinate installation with category 075000.
 46. Provide rough-ins and final connections for all food service equipment, as required on the mechanical and food service drawings. Coordinate location of rough-ins with category 114000. Plumbing exposed in the kitchen is to be stainless steel or chrome plated. Install all accessories supplied by category 114000 at the connections, including but not limited to: unions, gas hoses, pressure regulators, vacuum breakers, water filters, faucets, waste valves, swirl sprays, solenoid valves, and garbage disposals.
 47. All exposed pipes must have a sheet metal enclosure that are preassembled and be pre-painted by Mechanical contractor. Field touch up paint by Mechanical contractor. Color to be selected by Architect.
 48. This contractor is responsible for all caulking, gaskets, and sealing of mechanical and plumbing systems to provide air, water, and weather tight connections including but not limited to sealing of wall and floor penetrations and plumbing fixtures.

49. Furnish and install all supports for this contractor's equipment.
50. This contractor is to verify and stake locations of all underground utilities before beginning their work.
51. Receive duct smoke detectors from the Electrical contractor and install. Coordinate location with the Electrical contractor.
52. This contractor will be responsible for all mechanical demolition as shown on drawings. This is to include all pipe, insulation, sheet-metal, mechanical units, etc.
53. Each contractor performing demolition shall be responsible for protecting new and existing construction from damage due to their own work. If any adjacent surfaces are damaged, it will be the sole responsibility of the contractor at fault to completely repair and replace all damaged construction to the satisfaction of the Owner, Construction Manager, and Architect.
54. This contractor is responsible for the cutting and patching of all existing materials for the installation of all mechanical work. All penetrations through walls and ceilings will be fire and smoke stopped where as to comply with the State Fire Safety Requirements. Provide and install all firestopping materials. Contractor shall restore all surfaces to match existing conditions. This shall include all drywall, masonry, concrete, acoustical ceiling, steel, roofing, windows, insulated wall panels, plaster, flooring (all types), painting, and caulking work.
55. Provide complete testing, adjusting, and balancing of the mechanical systems, as specified. Provide additional testing at 90 days after completing the TAB, and during near-peak summer and winter conditions.
56. The contractor's field superintendent shall be present during testing and field reviews conducted by the various inspection agencies, including the commissioning agent and all Fire Marshall inspections.
57. Chlorinating and testing of this contractor's work, provide test reports prior to building occupancy.
58. Where drawings indicate that an existing piece of kitchen equipment is to be removed and reinstalled; this contractor shall disconnect and reconnect all mechanical utilities including but not limited to plumbing, HVAC, control wiring, etc.
59. The first floor sub-grade will be placed and compacted prior to the start of the underground work designated in this package. This contractor is responsible to excavate, install work and replace all fill to the specified density material within the building interior to the same condition it was prior to starting excavation for underground.
60. Provide shoring of any piping and/or ductwork.
61. This contractor is responsible for covering and securing, water-tight, all existing curbs on roofs that are to be removed and any of their own new through-floor or roof penetrations.
62. In rooms where existing ceiling is not scheduled to be removed and replaced, this contractor will be responsible for removal and replacement of ceiling tile as required to perform their work, as well as any cost associated with replacing with new tiles.
64. Secure, pay for, and provide all testing, permits, and inspections as required for beneficial occupancy by the Owner.

65. Provide all wiring and hookups to connect all parts, controls, fire safety devices and associated equipment necessary for complete and operational systems. Provide coordination with electrical contractor as required to interface with work described within this package.
66. Any fire protection/fire alarm/other utilities, remove and replace in order to perform own work. Have appropriate contractor reinstall lines.
67. Provide all supports required to attach to structure systems including rail supports and bracing.
68. Furnish to category 030000 or 040000 all inserts to be installed in concrete along with approved shop drawings for locations.
69. This contractor will be responsible for conformance to all national and local codes, regulations, testing and inspection requirements for beneficial occupancy by Owner.
70. Should there be discrepancies between what is shown or specified and what is required by State or local authorities, this contractor shall bring such discrepancies to the Architect's attention through Barton Malow in written form prior to bid.
71. Provide daily clean-up, according to Barton Malow standards, including daily removal of all materials and debris related to this category. If daily clean-up is not performed, the Construction Manager will provide his labor to complete the clean-up and the appropriate contractor will be back-charged.
72. The contractor's one year warranty will not commence until the owner has been trained on all newly installed equipment.
73. Include final cleaning of all fixtures and equipment furnished by this bid category.
74. Coordination with other trades, including mandatory participation in job meetings.
75. Furnish and install fall protection tie off points or warning lines for employees and subcontractors of this bid category working above 6 foot or on roofs.
76. Fully coordinate and obtain all required approvals from governing authorities and pay for all fees and permits required as part of this contractor's work. This contractor will be responsible for scheduling all health department inspections necessary under this scope of work with Macomb County. Schedule and demonstrate to the state mechanical, plumbing and electrical inspectors that the kitchen equipment is operating properly. This contractor will have their site foreman accompany the inspectors during all scheduled inspections.
77. This contractor is solely responsible for the proper and complete operation of the equipment to be furnished and installed. Include all components necessary for proper installation if components are not shown, but required.
78. Provide all required escutcheons, pedestals, etc. for finish trim for this scope of work, as specified.
79. Supply all materials according to the construction schedule. Any necessary storage of material due to the phased nature of the construction is this contractor's responsibility. All mechanical equipment is to be ordered and ready for installation as soon as possible.
80. Correct findings from balancing reports within three days of receipt of reports. This contractor is responsible for repeat visits by the balancing contractor resulting from incomplete systems. Provide all necessary sheaves and belts to accomplish design for all new equipment.
81. Furnish and install new stainless steel wall caps as shown.
82. Work must be completed at all buildings simultaneously.

83. This contractor is to provide final hook-up of Owner supplied equipment.
84. Flooring shall be protected with plastic and plywood while work overhead is being performed.
85. Include all steel framing required to accommodate new mechanical units.
86. The mechanical contractor is responsible for working with the district's commissioning agent to commission all new and existing valves and dampers.
87. All roofing, roofing patching, roof flashing required due to the installation of mechanical, sheet metal and plumbing work will be the responsibility of this contractor to hire a certified roofing contractor to repair the roof and keep warranty intact.
88. The removal and reinstallation of all louvers to accommodate installation of new work is the responsibility of this contractor.
89. Include in base bid, complete balance of all water and air systems throughout the buildings.
90. All ceiling removal and replacement necessary to complete this scope of work will be the responsibility of this contractor.
91. Include in base bid the cleaning of all new and existing strainers.
92. Unit ventilators must have controlled fan speed and compressor staging capabilities.
93. This contractor shall be responsible for furnishing and installing the kitchen exhaust and condensate hoods, and associated ductwork. Coordinate work with the Food Service Equipment contractor.
94. Factory mounted Andover controls is required for all new mechanical equipment.
95. Contractors to include chemical treatment chemicals from the district's chemical representative. All chemicals to clean, flush and fill for 1 year as directed in the specifications will be included in base bid.
96. All extras must be submitted within 60 days, or cost will be voided.
97. Submittals for mechanical equipment required by June 14th 2019.
98. Measure for new ductwork on roof by June 14th 2019.
99. – Cut / cap / disconnect only, mechanical demolition will be part of Demolition scope of work.
100. – Include investigation, rerouting, relocating of all plumbing, sheet metal, piping and mechanical items necessary to complete the project.
101. – Include investigation, rerouting, relocating of all plumbing, sheet metal, piping and mechanical items necessary to complete the project.

ALLOWANCES:**EXCLUDED FROM THIS CONTRACTOR'S WORK IS:**

1. None

SPECIAL CONSIDERATIONS:

1. All demolition work is assigned to the individual contractors that are responsible for the particular material or work in question. The contractor is to perform all demolition of the materials assigned in the specification sections listed in their own Description of Work, unless otherwise noted.

2. No deliveries will be accepted in or out of the construction site during the hours of 7:00pm – 7:00am.
3. Provide adequate supervision of your sub-contractors and your field personnel. This includes a field superintendent responsible for all work with the ability to make decisions.
4. All work under this scope shall comply with proper trade jurisdictions, even if it is necessary to assemble composite crews or subcontract to appropriate trades.
5. Every contractor performing Demolition of any type must provide a person who is trained and certified in lead renovation. This “certified lead renovator” must be on site at all when demolition work is occurring. The contractor must also meet all new OSHA, MOSHA, and DEQ requirements regarding lead. Contractors will be required to supply their firm’s name and copy of the certifications of the “Certified Lead Renovator” card as well as a copy of their firm’s certifications as a startup document. All other photo documentation requirements as required under the regulation will be required to be provided during the “closeout” phase of construction (as well as a copy maintained by the contractors for 3 years after date of substantial completion). The contractors will be required to post a notification packet in the buildings notifying all occupants of the upcoming renovations. Please visit the EPA’s website www.EPA.gov/lead for more information.
6. All contractors are to field verify all existing conditions prior to submitting a bid. Submitting a bid is acceptance of all field conditions. Do NOT scale the drawings. All dimensions must be verified in the field.
7. Provide photo identification badges to be worn by Contractor’s field personnel at all times. This contractor will be responsible for all re-mobilization costs for all phases of work.
8. Contractor is responsible to furnish all Barton Malow Co. start-up documents electronically and sworn affidavits within two (2) weeks of contract award. This includes signed contract, bonds, certificate of insurance, shop drawings and submittals
9. **This contractor is responsible to create a safety binder which will include the following information: site specific safety program, signed safety agreement (01600), MSDS sheets, Asbestos Training Certificates, CPR/first aid certificates, Lift certifications, Lead Renovators Certificates, Storm Water Certificates, Equipment Maintenance Logs, Equipment Training Letters, Roof Work Permits, & Letter indicating competent person. This information will be organized and clearly marked with the contractors name, address and division on the exterior of a 3 ring binder for each building you will be working at, include this safety binder as an item on your schedule of values with a value of \$1,000.00.**
10. Bidder shall complete the Bid form in its entirety, special attention is directed to the Allowances, Alternates and Unit Prices Section of the Bid Form.
11. This contractor is responsible to include all overtime and or shift time to avoid interfering with the owner operation and to meet the project schedule.
12. The mechanical contractor is to use MCMI from Sterling Heights for the controls portion of their work.

END OF BID CATEGORY 23 00 00 – MECHANICAL

WORK SCOPE

BID CATEGORY 230900 – INSTRUMENTATION AND CONTROL FOR HVAC

The work of this bid category includes, but is not limited to providing all labor, equipment, materials, scaffolding, hoisting and incidentals to complete all **instrumentation and control for HVAC work** in accordance with the specifications, drawings and applicable codes. All work is to be performed as shown on the plans and specified in the following technical specification sections:

DIVISION 1 - GENERAL REQUIREMENTS - All

DIVISION 20 – COMMON MECHANICAL REQUIREMENTS – ALL (AS IT RELATES)

DIVISION 22 – PLUMBING – ALL (AS IT RELATES)

DIVISION 23 – HEATING VENTILATING AND AIR CONDITIONING – ALL (AS IT RELATES)

230933

Temperature Controls

DIVISION 26 – ELECTRICAL – ALL (AS IT RELATES)

In addition to the above, this bid category includes, but is not limited to the Bidding Documents, Bidding and Contract Requirements, Division 1 - General Requirements of the Project Manual, and various other Technical Specifications interfacing with this work. The bidder is advised to review the work descriptions of the other categories and other referenced documents, so as to not misunderstand scope responsibilities.

THE SCOPE OF WORK IS TO INCLUDE, but is not limited to the following items:

1. Provide all new instrumentation and control equipment and systems indicated on the drawings.
This work shall be all control equipment as required for the mechanical systems, including but not limited to: plumbing, fire protection, domestic water piping, hydronic systems, chiller systems, and HVAC work indicated, and components required for a complete system.
2. Obtain approvals and provide all required permits, fee applications, etc., required for execution of work. Pay for inspection fees for same. Coordinate the inspection and testing of the systems with state and local governing agencies. Pay for all fee and testing charges in conjunction with the testing of each system.
3. Provide all cost to complete the interlocking of the smoke duct detectors as required. Provide and install all equipment required to complete this work.
4. Monitor and coordinate all dampers and VFDs with BMS and Fire Alarm System.
5. Furnish to the contractor constructing the walls, floors and ceilings, all access panels required to service the mechanical systems that are not shown on the drawings.
6. Perform all check, test, start-up and commissioning per contract documents.
7. Provide complete owner training on controls system. Provide evidence of training upon completion of session(s).
8. Coordinate graphics/front ends with Owner and Designer of record

9. Provide fire stopping as necessary to seal wall, floor and ceiling penetrations created for work under this bid category. Note: Fire stopping must adhere to all building codes and State Fire Marshal requirements.
10. Review the electrical specification and provide any electrical equipment required for control equipment that is required for a complete installation, but not shown.
11. Provide all troubleshooting and diagnosis of malfunctioning mechanical systems, including control work.
12. Rigging and hoisting for work of this Bid Category.
13. Caulk all products installed by this Contractor, where required for work of this Bid Category.
14. Receive, unload, store and protect all control equipment.
15. Protect the work of this contract, as required.
16. Provide final cleaning of all equipment installed by this bid category prior to Owner occupancy.
17. Coordinate overhead work with all trades.
18. This contractor will be responsible to remove and reinstall any ceiling tile necessary to complete all work under this bid category. This contractor will be responsible to replace any ceiling tiles that are damaged during this process.
19. Provide daily cleanup according to Barton Malow standards, including daily removal of all materials and debris related to this category. You must provide your own dumpster.
20. Each contractor, while on site shall provide to Barton Malow one (1) person for each five tradesmen (or portion thereof) employed at the site, one day a week for up to four (4) hours, for the exclusive purpose of performing overall project weekly cleanup. Please refer to section 1550 page two in regards to direct cleanup, weekly cleanup and final cleanup.
21. Submit all shop drawings and product submittals on materials within two (2) weeks of letter of intent. No partial submittals will be accepted. Contractor will be held responsible for damages due to late shop drawings and product submittals.
22. Review all specifications and project drawings, drawing notes, schedules, and schedule notes including architectural, mechanical, and electrical for areas requiring work described by this bid category and coordinate work with the respective contractors, include all costs in base bid.
23. Protect existing equipment and items to remain during construction including existing ceilings, walls, and flooring. Contractors are to protect all existing floors and existing owners materials remaining on site. Include protection of existing buildings and finishes within the pathway through the building from the construction area to the exterior. Correction of damage due to lack of adequate protection will be the responsibility of this contractor. In addition, all work is to be performed through existing ceilings, be it lay in, spline, drywall, or plaster, etc. Contractors are to include the cost of repairing and patching, removal and reinstallation and replacement of ceilings as required for work of their bid category.
24. Use of the elevator is not permitted. Include all rigging and hoisting to deliver and remove materials to / from the second floor.
25. Contractor shall have full time supervision including while their subcontractors are on-site.

26. Include all manpower, overtime, and composite crews in base bid to complete work per schedule. See section 00230.
27. The temperature control contractor is responsible for working with the district's commissioning agent to commission all new and existing valves and dampers.
28. All layout required for work of this bid category.
29. Contractor must be certified by one of the specified temperature controls manufacturers as listed in the specifications.
30. Demolition of all temperature controls items and system as shown, where mechanical equipment is demoed, and/or required for work of this bid category. The demolition work shall include all supporting items and hangers, unless shown to remain. Coordinate demolition activities with the Owner in order to maintain existing mechanical systems. Provide and install any temporary measures to keep the existing mechanical system operational for temporary heat. Coordinate with the mechanical contractor.
31. Provide firestopping at all new/re-used floor and wall penetrations. Include weather tight patching at exterior penetrations.
32. Furnish and install complete temperature controls system including but not limited to all related wiring, conduit, transformers, relays, monitoring devices, and equipment as shown, specified, or required for a complete installation.
33. Provide all sensor wells and control valves to the Mechanical Contractor for installation. All controls piping and wiring and secondary power wiring for control valves shall be completed by this Controls Contractor. Provide cut sheets on valves to the mechanical and testing & balancing contractor after submittal approval.
34. Obtain a permit from Barton Malow prior to any hot work. Provide all safety measures. Protect all existing construction during any and all hot work done by this bid category.
35. Label temperature control points on stats, junction boxes, and equipment as specified and/or per Troy Schools standards. Provide a detailed printed description. Label ceiling grid where VAV box controls are located.
36. Contractor is responsible for storage of all materials. Deliver materials to the site as needed. Storage in the building will be limited.
37. Coordinate controls with new mechanical equipment for a fully operational system.
38. Contractor responsible for coordinating all work with Mechanical Contractor.
39. Contractor responsible for obtaining copies of all approved mechanical equipment submittals from Mechanical Contractor.
40. Contractor is responsible to coordinate the installation of controls on vav boxes with the mechanical manufacturer. Coordinate with the Mechanical contractor.

41. Contractor is to setup remote access to the frontend with Troy Schools.
42. Contractor shall maintain a work deficiency list while onsite. Update weekly and submit to the mechanical contractor and copy the construction manager.
43. Contractor shall include time in the bid to work with the test and balance contractor.
44. Contractor shall verify in writing that the controls system is fully operational and operating correctly prior to test & balancing, commissioning and punchlist.
45. Contractor shall include time in the bid for commissioning.
46. Provide and install all operating tools for the control graphics system.
47. Cutting, patching, and coring for installation of new work shown or required for work of this bid category.
48. All wiring should be in a minimum of ½" conduit including temperature controls unless otherwise noted on the drawings.
49. All adjusting and cleaning shall be performed as specified per each spec section.
50. Items shown to be turned over to Owner must be accompanied by a transmittal and copied with signature of receipt to BMC.
51. Provide as-built drawings, manufacturer's warranties, and O/M manuals. Provide in-service training to Owner's staff on all systems and equipment as required. Training may not start until o/m manuals are approved by the architect and as-builts have been received. Warranties on equipment or systems will not start until owners training has been completed. Contractor is to provide extended warranties from the manufacture as necessary for compliance of the above mentioned.
52. Punch list will not start until all work has been completed.
53. All start-up and training is to be performed by a factory certified representative or manufacturer (as required per specification section) for that specific piece of equipment.
54. All field quality control and equipment commissioning shall be conducted per each specification section. A written itemized report shall be submitted to the construction manager verifying each individual item has been completed with all back-up field and test reports.
55. In addition to the contractors one year warranty on parts and labor, submit all extended warranties called out in the specifications.
56. When work covered by a warranty with a specific time period has failed and has been corrected by Contractor, the warranty shall be reinstated for a time period equal to the original warranty.
57. Provide extra materials as specified.
58. Contractors may not drop retainage to 5% until all warranties, o/m manuals, testing, commissioning, training, extra materials, and punchlist items have been completed, turned over, accepted, and documented. Contractors must also have up to date partial and final waivers from subcontractors and suppliers including a G707 form signed and sealed by the surety.

59. To bill out the remainder of retainage (from 5% to 0%), the contractor must set up a meeting with BMC to go over and/or collect the remaining closeout items for final payment (including all final waivers) as specified in section 01700 of this project manual.

60. SAFETY:

- It is this contractor's responsibility to provide full fall protection per Barton Malow requirements. Any workers found deficient will be permanently removed from the jobsite
- Provide each worker within this category with a hardhat (newer than 5 years old), safety glasses, reflective safety attire, work gloves, and other PPE required to perform job per the Barton Malow safety requirements. This is required at all times while working onsite. Failure to provide will result in removal of worker from site. Please review Barton Malow safety manual for specifics.
- All contractors are to take part in Barton Malow's stretch and flex program daily and turn a sign in sheet with daily report with those who participated in the program. Please review the Barton Malow safety manual for specifics.
- All contractors must provide a person who is trained and certified in working around lead materials. This "certified lead renovator" must be on site when all demolition is occurring or when lead materials are effected by construction. Proof of training and a certificate must be provided to Barton Malow during submittal phase confirming the training of the individual. The contractor must also meet all new Federal, OSHA, MIOSHA, and DEQ requirements regarding lead.
- Each person working on site shall review the BMC safety orientation video before beginning work. Each contractor shall submit documentation that all of their employees have viewed the video.

Excluded:

1. Testing and balancing
2. Installation of control valves provided to the Mechanical Contractor
3. Occupancy Sensors (provided and installed by Mechanical Contractor)

SPECIAL CONSIDERATIONS:

1. This project is subject to the State of Michigan Prevailing Wage. Review the Labor Relations section for prevailing wage rates for this project. Monthly certified payroll must be made available upon request.
2. All work under this scope shall comply with proper trade jurisdictions, even if it is necessary to assemble composite crews or subcontract to appropriate trades.
3. Bid proposals must be per plan and specs. Bids not conforming to plans and specifications will be rejected. Substitutions must be pre-approved in writing prior to bids or be submitted as voluntary alternates on the bid form.
4. All contractors are to field verify all existing conditions prior to submitting a bid. Submitting a bid is acceptance of all field conditions. Do NOT scale the drawings. All dimensions must be verified in the field.
5. Anyone listed on the National Sex Offender List is not allowed to be a part of this project and anyone who is convicted of a listed offense will be immediately dismissed from project. Provide photo identification upon arriving to the site and badges are to be worn by Contractor's field personnel at all times.

6. Provide photo identification badges to be worn by Contractor's field personnel at all times.
7. Contractor is responsible to furnish all Barton Malow Company start-up documents and submit submittals within two (2) weeks of contract award. This includes signed contract, bonds, certificate of insurance with CG 20 10 01 85 AND CG 20 37 10 01 endorsements, schedule of values, contact list, signature list, sub/supplier list, site specific safety program, MSDS's, and the Barton Malow Company Safety Certificate (section 01600). The submittal register will be issued at award of contract. Each contractor and office engineer is to attend a 2-Part Construction Kick-Off and Pre-Construction Meeting.
8. Bidder shall complete the Bid form in its entirety, special attention is directed to the Labor Rate, Alternates and Unit Prices Section of the Bid Form.
9. This Bidder is required to submit alternate prices identified in the Bidding Documents, which pertain to their work. These alternate prices must be separate from their base bid on the Bid Proposal Form as described in Section 00200 Instructions to Bidders.
10. The special provisions outlined in Section 00210 Description of the Work form a part of this bid category work description and apply to this bidder's scope of work.
11. All bidders are required to review the General Conditions of the contract located in Section 00700.
12. Every contractor performing Demolition of any type must provide a person who is trained and certified in lead renovation. This "certified lead renovator" must be on site at all when demolition

work is occurring. The contractor must also meet all new OSHA, MOSHA, and DEQ requirements regarding lead. Contractors will be required to supply their firm's name and copy of the certifications of the "Certified Lead Renovator" card as well as a copy of their firm's certifications as a startup document. All other photo documentation requirements as required under the regulation will be required to be provided during the "closeout" phase of construction (as well as a copy maintained by the contractors for 3 years after date of substantial completion). The contractors will be required to post a notification packet in the buildings notifying all occupants of the upcoming renovations. Please visit the EPA's website www.EPA.gov/lead for more information.

13. According to new EPA federal mandate, beginning April 2010 contractors performing work that disturbs lead-based paint in schools built before 1978 must be EPA certified and follow specific work practices to prevent lead contamination. It will be the responsibility of all contractors on site to follow proper work practices to prevent lead contamination. For more information, please review section 00810.
14. This contractor is responsible to create a safety binder which will include the following information: site specific safety program, signed safety agreement (01600), MSDS sheets, Asbestos Training Certificates, CPR/first aid certificates, Lift certifications, Lead Renovators Certificates, MIOSHA 30 training Certificates, Storm Water Certificates, Equipment Maintenance Logs, Equipment Training Letters, Roof Work Permits, & Letter indicating competent person. This information will be organized and clearly marked with the contractors name, address and division on the exterior of a 3 ring binder for each building you will be working at, include this safety binder as an item on your schedule of values with a value of \$1,000.00.
15. Provide daily clean-up and weekly unidentifiable clean-up, according to Barton Malow standards, including subcontractors for work of this bid category. If daily clean-up and weekly unidentifiable clean-up is not performed, the construction manager will provide labor to complete the clean-up and the appropriate contractors will be back charged.
16. If contractor is behind schedule and is notified by Barton Malow Company, the contractor shall be required to accelerate the work at its own expense. The contractor shall employ such means as overtime work, multiple work shifts, and additional equipment, and shall continue to do so until the progress of the work, in the opinion of Barton Malow, is in conformance with the master project construction schedule.

END OF BID CATEGORY 230900 - INSTRUMENTATION AND CONTROL FOR HVAC

BID CATEGORY 26 00 00 – ELECTRICAL

The work of this bid category includes but is not limited to providing all labor, equipment, materials, scaffolding, hoisting and incidentals to complete all the **Electrical** in accordance with the specifications, drawings and applicable codes. All work is to be performed as shown on the plans and specified in the following technical specification sections:

<u>Specification Section</u>	<u>Description of Section</u>
<u>DIVISION 01 – GENERAL REQUIREMENTS - ALL</u>	
<u>DIVISION 02 – EXISTING CONDITONS</u>	
024119	Selective Demolition
<u>DIVISION 03 – CONCRETE</u>	
033000	Cast-In-Place Concrete
<u>DIVISION 07 – THERMAL AND MOISTURE PROTECTION</u>	
078413	Firestopping
079200	Joint Sealants
<u>DIVISION 26 – ELECTRICAL – ALL</u>	
<u>DIVISION 27 – COMMUNICATION – ALL</u>	
<u>DIVISION 28 – ELECTRICAL SAFETY AND SECURITY - ALL</u>	

In addition to the above, this bid category includes but is not limited to the Bidding Documents, the Bidding and Contract requirements and Division 1 General Requirements of the Project Manual and various other Technical Specifications interfacing with this work. The bidder is advised to review the work descriptions of the other categories and other referenced documents so as to not misunderstand scope responsibilities.

THE SCOPE OF THIS BID CATEGORY SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING ITEMS:

1. It is the responsibility of this Bid Category to review all drawings & drawing notes, including civil, architectural, structural, mechanical, and electrical drawings, and include items requiring work that is generally defined as the responsibility of this Bid Category within the work description unless otherwise noted above in the scope of work.
2. This contractor shall be responsible for receiving, off-loading, hoisting into/onto building including the safe and secure storage of materials related to this work.
3. Coordinate with other trades, including mandatory participation in job meetings.
4. Provide daily clean-up according to Barton Malow standards, including daily removal of all materials and debris related to this category. If daily clean-up is not performed, the Construction manager will provide a laborer to complete the clean-up and the appropriate contractor will be back charged.
5. This contractor will be responsible for all re-mobilization costs for all phases of work.
6. This contractor is to provide all legal disposal off-site of the debris that is a result of their work.

7. Coordinate the location and sizes of all openings with the appropriate trades.
8. This contractor shall be responsible for layout engineering, and ongoing clean up as it pertains to this work, coordinate layout with other contractors.
9. Before sawcutting or making any cuts in the floor, all contractors must use ground penetrating radar, and must provide proof that it was used, to the Barton Malow site superintendent.
10. In all locations where this contractor sawcuts the floor, this same contractor is also responsible for pouring back concrete. This contractor must coordinate with flooring contractor as to provide proper floor finish and height.
11. Any ceilings accessed are this contractor's responsibility to remove and reinstall. Coordinate above ceiling work with mechanical and architectural trades.
12. This contractor shall be responsible for receiving, off loading, hoisting into/onto building including the safe and secure storage of materials related to this work.
13. For the duration of your work, all building systems must remain operational and there shall be no interruption to the owner's systems while they are occupying the building unless previously instructed by BMC. Coordinate and schedule shut-downs as required for this contractors work during off-hours.
14. Obtain approvals, permits and coordinate the inspection and testing of the systems with state governing agencies. This contractor is responsible for and shall coordinate all work with public utility companies, as required. Pay for all fees and testing charges for each system. The contractor's field superintendent shall be present during testing and field reviews conducted by the various inspection agencies.
15. This contractor is responsible for all testing of electrical systems, sound systems, and fire alarm system upon completion of the installation.
16. This contractor will provide all temporary lighting and power per code and to meet minimum OSHA and **BMC requirements.**
17. Provide and maintain all necessary barricades, safety and warning devices until work is safe and complete.
18. All wiring/wiring paths to be per this contract. Verify all cable runs to be within specified distance.
19. Provide blank covers for data receptacles not used.
20. Rough-ins and final electrical connections for mechanical and electrical equipment, specialties, and casework, as specified. Coordinate with other trades to provide all required electrical connections. Furnish and install all electrical equipment and accessories as related to other trades.
21. The first floor sub-grade will be placed and compacted prior to the start of the underground work designated in this package. This contractor is responsible for all layout, excavation, backfilling, and compaction for any underground or underfloor electrical work required. Replace all fill to the specified density following excavation for the work of this category.
22. Contractor is responsible for removal all spoils resulting from their work from the site.
23. Verify and stake locations of all underground utilities before work begins.
24. Coordinate with Architect/Engineer before penetrating any structural members.

25. Provide proper identification of panels, circuits and systems.
26. Furnish and install all specified backing and supports for fixtures and equipment.
27. This contractor will provide all conduit, wiring, panels, devices, switches and accessories necessary for the installation of a complete power system.
28. Provide all required escutcheons, pedestals, etc. for finish trim for this scope of work, as specified.
29. Provide and locate all access doors to architectural trades for setting as required for access to electrical equipment.
30. This contractor is to wire all motors, disconnect switches, and starters supplied by either themselves or category 230000.
31. Furnish all pipe and conduit sleeves with bushings at each end and provide and install fire stopping for all penetrations through rated walls created by or for electrical systems.
32. Provide and install all conduits, raceways, and boxes for telephone and computer (data) system. This contractor must coordinate with the Owner's representative as to size and type of equipment.
34. Furnish, install and maintain all weather protection as required to carry out the scope of work
35. Provide and install complete fire alarm system as described in the technical specifications, supporting phasing of the project, shown on the drawings, and required to meet applicable codes and regulations. Coordinate all fire alarm work with mechanical contractor's work to provide all required safety and emergency shut down features. All fire alarm panel modifications required by inspector to match door number and room numbers shall be in base bid. All fire alarm devices are required to be installed per code. No extras will be given to modify locations of devices that were not installed per code. The fire alarm and electrical contractor are responsible to field verify existing devices. The replacement of existing fire alarm devices not shown on drawings shall be included in base bid. The intent is to provide pricing for a complete replacement of the system.
36. This contractor will be responsible to provide and install smoke detectors to the building fire detection system and electrical service.
37. This contractor is responsible for and shall coordinate all work with public utility companies, as required. Pay for all fees and testing charges for each system. Follow up with fire alarm contractor to insure drawings are sent to the state as soon as possible for review. New fire alarm devices must be installed, tested & inspected and operational prior to school.
38. Provide duct mounted smoke detectors to category 230000 for installation. This contractor will be responsible to connect smoke detectors to the buildings fire detection system and electrical service.
39. Provide all equipment pads required for electrical equipment shown or not shown but required for a complete installation.
40. This contractor is responsible for the cutting and patching of all existing materials for the installation of all electrical work. All penetrations through walls and ceilings will be fire and smoke stopped where as to comply with the State Fire Safety Requirements. Provide and install all firestopping materials. Contractor shall restore all surfaces to match existing conditions. This shall include all drywall, masonry, concrete, acoustical ceilings, steel, windows, insulated wall panels, plaster, painting, and caulking work.
41. Provide and install all clocks, integrated intercom/telecommunications, sound system, and connections to projection system equipment as shown and specified, including all related materials.

42. Provide protection of equipment. Damage to equipment due to a lack of adequate protection will be the responsibility of this contractor.
43. Provide complete lighting system with occupancy and/or automated lighting controls, as required.
44. This contractor will be responsible for all electrical demolition as shown on drawings. This is to include all conduit, wiring, light fixtures, etc. This contractor is responsible for all disconnects for their own demolition as well as disconnects of the existing mechanical and kitchen equipment.
45. Each contractor performing demolition shall be responsible for protecting new and existing construction from damage due to their own work. If any adjacent surfaces are damaged, it will be the sole responsibility of the contractor at fault to completely repair and replace all damaged construction to the satisfaction of the Owner, Construction Manager, and Architect.
46. This contractor is responsible for the cutting and patching of all existing materials for the installation of all electrical work. All penetrations through walls and ceilings will be fire and smoke stopped where as to comply with the State Fire Safety Requirements. Provide and install all firestopping materials. Contractor shall restore all surfaces to match existing conditions. This shall include all drywall, masonry, concrete, acoustical ceilings, steel, windows, insulated wall panels, plaster, painting, and caulking work.
47. Any fire protection/fire alarm/other utilities, remove and replace in order to perform own work. Have appropriate contractor reinstall lines.
48. Where drawings call for light fixtures to remain or be re-installed in a new ceiling grid; this contractor shall either remove and safely store the fixtures for later reinstallation OR tie the fixtures up in an appropriate manner.
49. In rooms where existing ceiling is not scheduled to be removed and replaced, this contractor will be responsible for removal and replacement of ceiling as required to perform their work.
50. This contractor will furnish, upon completion of the work, as-built electronic drawings showing the installation of the work as completed and operating and maintenance manuals as described in the specifications and as required by owner.
51. It is the responsibility of this Bid Category to review all drawings & drawing notes, including civil, architectural, structural, mechanical, and electrical drawings, and include items requiring work that is generally defined as the responsibility of this Bid Category within the work description unless otherwise noted above in the scope of work.
52. This contractor is to review the scope of work for division 23 mechanical for work by this bid category. If there is any confusion on the scope of work for these related categories submit a pre-bid RFI or clarify what is and is not included on the bid proposal form. This contractor's work will interface with the work of division 23 Mechanical in areas of wiring valves alarms, flow switches, detectors, control wiring, equipment etc. This bid division must be familiar with all related electrical requirements.
53. Reference all drawings. This contractor is responsible for all demo notes and new work notes on all electrical drawings.
54. Rough-ins and final electrical connections for mechanical and electrical equipment, specialties, and casework, as specified. Coordinate with other trades to provide all required electrical connections. Furnish and install all electrical equipment and accessories as related to other trades.
55. base bid to include all investigation and rerouting/relocating of electrical utilities and electrical components necessary to complete the demo project.
56. Save 2 light poles when removed. See Civil plans.
57. – Pay close attention to Alternate E1 noted on Sheet E3.1B. Provide price on bid form.

57. All extras must be submitted within 60 days, or cost will be voided.

ALLOWANCES:

Include an allowance of \$120,000, to be utilized per BMC discretion.

EXCLUDED FROM THIS CONTRACTOR'S WORK IS:

1. None

SPECIAL CONSIDERATIONS:

1. All demolition work is assigned to the individual contractors that are responsible for the particular material or work in question. The contractor is to perform all demolition of the materials assigned in the specification sections listed in their own Description of Work, unless otherwise noted.
2. No deliveries will be accepted in or out of the construction site during the hours after 7:00pm and before 7:00am.
3. Provide adequate supervision of your sub-contractors and your field personnel. This includes a field superintendent responsible for all work with the ability to make decisions.
4. Every contractor performing Demolition of any type must provide a person who is trained and certified in lead renovation. This "certified lead renovator" must be on site at all when demolition work is occurring. The contractor must also meet all new OSHA, MOSHA, and DEQ requirements regarding lead. Contractors will be required to supply their firm's name and copy of the certifications of the "Certified Lead Renovator" card as well as a copy of their firm's certifications as a startup document. All other photo documentation requirements as required under the regulation will be required to be provided during the "closeout" phase of construction (as well as a copy maintained by the contractors for 3 years after date of substantial completion). The contractors will be required to post a notification packet in the buildings notifying all occupants of the upcoming renovations. Please visit the EPA's website www.EPA.gov/lead for more information.
5. All contractors are to field verify all existing conditions prior to submitting a bid. Submitting a bid is acceptance of all field conditions. Do NOT scale the drawings. All dimensions must be verified in the field.
6. Provide photo identification badges to be worn by Contractor's field personnel at all times. This contractor will be responsible for all re-mobilization costs for all phases of work.
7. Contractor is responsible to furnish all Barton Malow Co. start-up documents electronically and sworn affidavits within two (2) weeks of contract award. This includes signed contract, bonds, certificate of insurance, shop drawings and submittals
8. **This contractor is responsible to create a safety binder which will include the following information: site specific safety program, signed safety agreement (01600), MSDS sheets, Asbestos Training Certificates, CPR/first aid certificates, Lift certifications, Lead Renovators Certificates, Storm Water Certificates, Equipment Maintenance Logs, Equipment Training Letters, Roof Work Permits, & Letter indicating competent person. This information will be organized and clearly marked with the contractors name, address and division on the exterior of a 3 ring binder for each building you will be working at, include this safety binder as an item on your schedule of values with a value of \$1,000.00.**
9. Bidder shall complete the Bid form in its entirety, special attention is directed to the Allowances, Alternates and Unit Prices Section of the Bid Form.
10. This contractor is responsible to include all overtime and or shift time to avoid interfering with the owner operation and to meet the project schedule.
11. The electrical contractor is to coordinate with Audio Sentry for the security system and National Time for the fire alarm portion of their work.

END OF BID CATEGORY 26 00 00 – ELECTRICAL

BID CATEGORY 310000 – SITEWORK and CONCRETE

The Work of this Bid Category includes but is not limited to providing all labor, equipment, materials, scaffolding, hoisting and incidentals to complete all Earthwork, Site Work, Paving, Concrete and Landscaping in accordance with the Contract Documents and applicable codes. All Work is to be performed as shown on the plans and specified in the following technical Specification sections:

<u>Specification Section</u>	<u>Description of Section</u>
<u>DIVISION 01 – GENERAL REQUIREMENTS</u>	All Sections
<u>DIVISION 02 – EXISTING CONDITIONS</u>	
024119	Selective Site Demolition
<u>DIVISION 03 – CONCRETE</u>	
033000	Cast In Place Concrete
<u>DIVISION 07 – THERMAL AND MOISTURE PROTECTION</u>	
071113	Bituminous Dampproofing
072100	Building Insulation
079200	Joint Sealants
<u>DIVISION 31 – EARTHWORK</u>	All Sections
<u>DIVISION 32 – EXTERIOR IMPROVEMENTS</u>	All Sections
<u>DIVISION 33 – UTILITIES</u>	All Sections

In addition to the above, this Bid Category requires adherence to and coordination with various other technical Specifications interfacing with this Work. The Bidder shall review the Work descriptions of the other Bid Categories as set forth in Section 00210 of the Project Manual so as to not misunderstand scope responsibilities.

THE SCOPE OF WORK IS TO INCLUDE, but is not limited to, the following items:

1. This contractor shall be responsible for all layout, engineering, elevations and layout coordination with other contractors. It is the responsibility of this contractor to hire an accredited surveying firm approved by Barton Malow Company to layout all work of this category. Upon completion of the work furnish signed and sealed as-builts that tie all site improvements to property lines and/or building corners and meet the requirements of Section 01720 of the Project Manual.
2. It is the responsibility of this Bid Category to review all drawings & drawing notes, including civil, architectural, structural, mechanical, and electrical drawings, and include items requiring work that is generally defined as the responsibility of this Bid Category within the work description unless otherwise noted above in the scope of work.
3. Contractor is responsible to furnish all Barton Malow Co. start-up documents within two (2) weeks of contract award. This includes signed contract, bonds, certificate of insurance, shop drawings and submittals, and contractors safety program with signed safety agreement (01600), Safety Program Review checklist (01600) and MSDS.

4. Install and maintain all soil erosion measures shown or required on the drawings and remove upon job completion. Measures shall also include but are not limited to road sweeping including water trucks for dust control.
5. Contractor shall engage the services of a State of Michigan certified storm water management operator and be responsible for maintaining all soil erosion measures at the project site and all required paperwork including logs maintained at the site. Logs are to be completed on a weekly basis and after each rain event.
6. Locate and mark all existing utilities prior to any excavation including site lighting and irrigation. MISS DIG will only mark public utilities. Engage the services of a private utility locating company to mark existing private utilities. Damage to existing utilities, public or private, including communication lines caused by work of this bid category will be the responsibility of this contractor.
7. Verify and stake locations of all existing underground utilities before work begins.
8. This contractor will be responsible for all re-mobilization costs for all phases of work.
9. This contractor will include 40 hours of street cleaning with the use of a broom truck, per the Barton Malow site superintendent's discretion. This contractor will include any mobilization costs necessary to transport street sweeper to the site for multiple visits until the 40 hours of street sweeping is complete.
10. Contractor to include in their base bid all cost to obtain and purchase all permits and fees required to perform the work contained in this category, from the appropriate agencies.
11. Provide and pay for all city, county, and MDOT permits, inspection fees, and maintenance bonds required for work of this bid category. Including all costs for City of Troy fees (soil erosion application, soil erosion permit fees, City of Troy inspection fees, bond fees, applications fees, etc.
12. Include an allowance of \$60,000 for potential undercuts recommended by the testing consultant. T&M tickets for work shall be signed by the BM Site Superintendent and turned in when billing against this allowance.
13. Provide all clearing, grubbing, earthmoving, excavation, filling, back-filling, sheeting, shoring, bracing, saw-cutting, grading, and site balancing required for this project as specified.
14. Provide all sanitary sewer, storm sewer, underdrain, edgredrain and watermain as specified.
15. Provide all site concrete including but not limited to sidewalks and curbs as shown on drawings. Place, grade and compact the required granular cushions, as specified, for site concrete placement. Provide and install all concrete reinforcements, curing compounds, control joints, expansion joints, joint sealants, caulking, fillers and related accessories, as specified.
16. This contractor is responsible for all site demolition as shown on drawings including but not limited to trees, tree stumps, asphalt, concrete, curb, fencing. Demo of all items shown on the civil drawings and removed off site to a legal dump. All excess soils are to be removed off site to a legal dump.
17. Protect existing curbs during construction. Replace any curbs that are damaged or undermined. Identify and curb that is damaged prior to construction start. Document with BMC and TSD.
18. Contractor is to remove all brush and overgrowth along fences that are shown to be demolished.
19. Provide milled butt joints where new pavement meets existing.
20. Thoroughly clean existing and new asphalt before applying new pavement striping. Yellow striping only, per district standard.
21. Adjust and repair all structures as shown and/or noted.
22. This contractor is responsible for removal of all spoils off-site.

23. This contractor will be responsible to remove and install all topsoil and backfill to specified elevation with class II material or as specified by the Engineer.
24. Furnish and install all backfill and compaction behind curbs, walks, and all areas disturbed by work of this bid category to a depth of 3" below existing grade and/or for new grade elevations shown for the installation of topsoil and seeding.
25. Provide and install all stone base per the contract documents.
26. Do not install stone base until site lighting is energized, working properly, and verified by electrical contractor.
27. This contractor is responsible for dewatering within their own excavations during the performance of their own work.
28. Fine grade and proof roll subgrade and sub base.
29. Remove all organic material and unsuitable soils that go above and beyond the new profile depth and subgrades at the direction of BMC, testing agency, or city inspector. Replace excavated material with specified engineered fill. Provide allowances as described above for this work.
30. Provide and install all topsoil, seeding, sodding, fertilizer and mulch, as specified. Rope off any areas listed above with wooded stakes and rope to keep foot traffic from disturbing newly placed work. Perform any temporary seeding as required for soil erosion control.
31. Provide all landscaping work, as specified.
32. Provide all grading, leveling, and restoration for all trades, when construction is complete to allow for the installation of all planted materials, concrete, asphalt, etc., on site.
33. Provide all fencing and gates as specified. All barricading and fencing is to remain closed during work hours and is to be in proper place at the end of each work day. Supply, install, and maintain all barricades to keep the public out of the work area per staging plans.
34. Provide daily clean-up, according to Barton Malow standards, including daily removal of all materials and debris related to this category. If daily clean-up is not performed, the Construction Manager will provide his labor to complete the clean-up and the appropriate contractor will be back charged.
35. Coordination with other trades, including mandatory participation in job meetings.
36. Punch list will not begin until all contract work is completed as noted in the contract.
37. Provide all as-builts and o/m manuals to BMC.
38. In addition to a contractors one year warranty on parts and labor, submit all extended warranties called out in the specifications.
39. Contractors may not drop retainage to 5% until all warranties, o/m manuals, as-builts, final inspections, and punch list items have been completed, turned over, accepted, and documented. Contractors must also have up to date partial and final waivers from subcontractors and suppliers including a G707 form signed and sealed by the surety.
40. To bill out the remainder of retainage (from 5% to 0%), the contractor must set up a meeting with BMC to go over and/or collect the remaining closeout items for final payment, including all final waivers from subs and suppliers, as specified in section 01700 of this project manual.
41. Provide and install all fencing and temporary fencing shown on bid documents.
42. Provide all site signage and temporary site signage shown on plans and staging plans
43. Provide and install all joint sealants noted for this scope of work.
44. Include all temporary and permanent fencing.

45. Compact and regrade after utilities are in place.
46. This contractor will be responsible for the installation of all site utilities on the utility plans. Contractor to install utilities up to the building foundation. Coordinate tie-in with mechanical contractor.
47. Contractor is responsible to furnish and install all cast in place concrete slabs as shown in drawings. This does not include any concrete associated with sitework.
48. Furnish and install all reinforcing steel and steel mesh in concrete.
49. This contractor shall provide adequate supervision of sub-contractors and field personnel. This includes a field superintendent responsible for all work with the ability to make decisions.
50. Provide daily clean-up according to Barton Malow standards, including daily removal of all materials and debris related to this category. If daily clean-up is not performed, the Construction manager will provide a laborer to complete the clean-up and the appropriate contractor will be back charged.
51. All demolition work is assigned to the individual contractors that are responsible for the particular material or work in question. The contractor is to perform all demolition of the materials assigned in the specification sections listed in their own Description of work, unless otherwise noted.
52. This contractor is responsible for all imbeds provided by others including but not limited to anchor bolts, "J" bolts. Coordinate exact location with associated contractors.
53. Receive, sign for, unload, store and install miscellaneous metal fabrications embedded in concrete furnished by others, to include anchor bolts and sleeves.
54. Provide 48-hour notice to construction manager prior to placement of concrete to allow for Owner's testing consultant to be scheduled.
55. Each contractor performing demolition shall be responsible for protecting new and existing construction from damage due to their work. If any adjacent surfaces are damaged it will be the sole responsibility of the contractor at fault to completely repair and replace all damaged construction to the satisfaction of the Owner, Construction Manager and Architect.
56. Coordinate all required inspections by local or state for this scope of work.
57. Furnish, install and maintain temporary barricades, handrails, caution tape and signage for foundation elevation and grade changes per all local, state and federal authorities having jurisdiction.
58. Furnish, install and maintain reinforcement steel/dowel safety caps per MIOSHA standards.
59. This contractor shall be responsible to furnish and install all sleeves for all work by other trades that pass through concrete slabs. Coordination with other trades is required.
60. Furnish and install all base materials shown or specified as required for work of this category.
61. Furnish and install all concrete work, including vapor barriers/retarders, waterstops and sheet waterproofing as it pertains to concrete flatwork, include under slab drainage, piping and fill as required.
62. Coordinate with all electrical, mechanical and plumbing trades during installation of in slab or under slab rough- ins.
63. Furnish and install expansion joint materials and control joints as shown or specified. Sawcutting of control joints must meet industry standards. Dependent on weather conditions, typical standards dictate sawcutting be done within/less than 24 hours. It shall be the responsibility of this contractor to repair any adverse effects to the slab as a result of sawcutting.
64. Include all formwork necessary and pour stops required for concrete flatwork.

65. Contractor shall be responsible for all staking necessary to complete their own work. Contact MISSDIG prior to any work which may conflict with existing underground utilities.
66. Contractor shall provide and install all footings/foundations required to complete their own work. Coordination with other trades, staking and verification of all existing utility locations required prior to starting footing work.
67. Furnish and place concrete sealers, curing and hardener compounds as shown or specified. Note: concrete must be sealed in a timely manner to avoid staining and discoloration due to other construction activities.
68. Provide, place and maintain all hot and/or cold weather protection for concrete as weather conditions dictate.
69. It is the responsibility of this bid category contractor to review all drawing notes including mechanical and electrical drawings for areas requiring work described by this bid category and include same in bid. Penetrations through slab shall be coordinated with mechanical and electrical trades.
70. Include all slab depressions/thickened slabs as shown or specified as required for equipment or floor finishes. This contractor is responsible for grinding and/or patching to obtain the dimensions shown or specified.
71. Owners' operations take precedence over all construction activities. All cutover from existing systems to new systems shall not interfere with Owner operations. If certain construction activities are anticipated to cause disruption with owners' operations (noise, etc.), these activities shall be coordinated with the owner or scheduled on weekends/after hours.
72. This contractor shall include all overtime and shift time necessary to complete the work within the project schedule. Crew sizes shall be dependent on available work. Contractor will be required to work in multiple areas simultaneously and concurrently.
73. Furnish and install all concrete work and concrete reinforcement specified or indicated in the Drawings.
74. The Site Work Contractor will be installing the building pad, grading and engineered fill required prior to slab placement.
75. It is this contractor's responsibility to install the grout under all structural steel columns as indicated.
76. It is this contractor's responsibility to take any precautions necessary to prevent damage to underground electrical and/or mechanical piping while installing fill and concrete. This contractor will bear all cost associated with damaged piping.
77. Confirm location of all underground site utilities before performing work. Contact MISS-DIG. Contractor shall be responsible for any damages. Notify Owner immediately upon discover of any buried utilities.
78. Install OSHA approved re-steel caps on all protruding bars related to this category.
79. Perform all excavation and backfill required for construction of the foundation system. Backfill with clean soils and compact.
80. Install anchor bolts per the working documents. The anchor bolts will be provided by the steel contractor.
81. This contractor will excavate at the foundations to allow the mason to build the block above finish floor. When the masonry work is complete, backfill as required.
82. Each category shall be responsible for items of work as described in Section 00210 Descriptions of Work/Special Provisions/Requirements.

83. Furnish and install all interior cast-in-place concrete flatwork, including, but not limited to slab-on-grade, depressed slabs, supported slabs, thickened slabs, and toppings (precast planks). Sawcut joints as specified and required.
84. Furnish and install all concrete reinforcements, woven wire fabric, control joints, expansion joints, isolation joints, joint sealants, caulking, fillers and all related accessories.
85. Furnish and install all required surface treatments, sealers, hardeners and curing compounds for all concrete, including all preparation and cleaning required. All surface treatments must be compatible with the appropriate flooring materials.
86. Place, grade, and compact the required granular fill, as specified, for concrete placement of their own work as shown on drawings.
87. Provide horizontal and vertical rigid insulation along perimeter foundation walls as shown in details.
88. Concrete floor flatness and finish should be in accordance with the specifications and the type of floor covering to be installed. Coordinate with the appropriate contractor for finish requirements. This contractor will be responsible for any additional floor prep work required that does not meet the specifications/requirements.
89. Final grade and re-compact subgrade, as required, after under-floor mechanical and electrical are installed prior to slab-on-grade preparation.
90. It is this contractor's responsibility to take any precautions necessary to prevent damage to underground electrical and/or mechanical piping while installing fill and concrete. This contractor will bear all cost associated with damaged piping.
91. Provide and install all required moisture and vapor barriers and expansion materials per the working documents.
92. Install all exterior stoops as indicated on the plans.
93. Designate a concrete washout area and remove all concrete spoils at the end of the job. Wash out area to be consolidated in an area approved by the Construction Manager.
94. Cover and protect concrete work, as weather requires.
95. This contractor is responsible for forming around all openings and penetrations through concrete floors.
96. Include all engineered fill necessary for the project.
97. Remove sanitary line on south and west side of the demo area, cap in two locations, terminate sanitary tie-ins on east side of the demo area, see C1.0 for approximate locations.
98. Infill areas with concrete, see Sheet C2.0.
99. Provide for testing of floor slabs after placement as required for levelness.
100. Include (unit pricing) for undercut existing areas of failed parking lot. Several locations will need repair. Unit prices will be used to complete this portion of work.
101. All concrete foundation/rebar submittals are required by June 11, 2019.
102. Include in base bid all exterior concrete including bollards, sidewalks and stoop slabs and stoop foundations.

ALLOWANCES:

1. Include an allowance of \$60,000 for potential undercuts recommended by the testing consultant. Any unused portion will be returned to the Owner via a deduct change order.

EXCLUDED FROM THIS CONTRACTOR'S WORK is:

1. Electrical work

UNIT PRICES:

1. Provide unit prices for undercuts per compacted in place cubic yard on bid form. Include removal and disposal of soils to 12" depth. Install 12" of 1x3 crushed concrete.
2. See Bid Form for additional Unit Pricing

SPECIAL CONSIDERATIONS:

1. All work under this scope shall comply with proper trade jurisdictions, even if it is necessary to assemble composite crews or subcontract to appropriate trades.
2. Provide clean-up as outlined in the general requirements section 01550. Dumpsters will be provided for unidentifiable debris only.
3. Bidder shall complete the Bid form in its entirety; special attention is directed to the Alternates and Unit Prices Section of the Bid Form.
4. The special provisions outlined in Section 00210 Description of the Work form a part of this bid category work description and apply to this bidder's scope of work.
5. This contractor is responsible to create a safety binder which will include the following information: site specific safety program, signed safety agreement (01600), MSDS sheets, Asbestos Training Certificates, CPR/first aid certificates, Lift certifications, Lead Renovators Certificates, Storm Water Certificates, Equipment Maintenance Logs, Equipment Training Letters, Roof Work Permits, & Letter indicating competent person. This information will be organized and clearly marked with the contractors name, address and division on the exterior of a 3 ring binder for each building you will be working at.

END OF BID CATEGORY – SITEWORK and CONCRETE