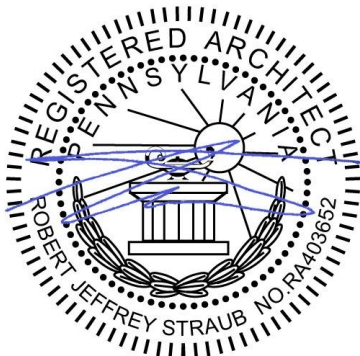


The School District of Haverford Township Additions and Renovations to Coopertown Elementary School

VOLUME 1 DIVISIONS 0 and 1 PROJECT MANUAL

CRA PROJECT NO. 3758

March 10, 2025



Crabtree, Rohrbaugh & Associates - Architects

401 East Winding Hill Road, Mechanicsburg, PA 17055

www.cra-architects.com

P: 717.458.0272

Maryland • Pennsylvania • Virginia • West Virginia

VOLUME 1

PROJECT MANUAL

FOR

**ADDITIONS AND RENOVATIONS TO
COOPERTOWN ELEMENTARY SCHOOL**

FOR THE

**THE SCHOOL DISTRICT OF HAVERFORD TOWNSHIP
50 East Eagle Road
Havertown, PA 19083**



**CRABTREE, ROHRBAUGH & ASSOCIATES
ARCHITECTS**

401 East Winding Hill Road
Mechanicsburg, Pennsylvania 17055

ARCHITECT'S PROJECT NO. 3758

TABLE OF CONTENTS
VOLUME 1 - PROJECT MANUAL

BIDDING REQUIREMENTS, CONTRACT FORMS AND CONDITIONS OF THE CONTRACT

SECTION 000005	COPYRIGHT
SECTION 000010	ADVERTISEMENT FOR BIDS
SECTION 000100	INSTRUCTIONS TO BIDDERS (AIA DOCUMENT A701-2018)
SECTION 000101	SUPPLEMENTARY INSTRUCTIONS TO BIDDERS
SECTION 000301	BID FORM - CONTRACT 3758-1 GENERAL CONSTRUCTION
SECTION 000302	BID FORM - CONTRACT 3758-2 HVAC CONSTRUCTION
SECTION 000303	BID FORM - CONTRACT 3758-3 PLUMBING CONSTRUCTION
SECTION 000304	BID FORM - CONTRACT 3758-4 ELECTRICAL CONSTRUCTION
SECTION 000420	CONTRACTOR'S QUALIFICATION STATEMENT (AIA DOCUMENT A305)
SECTION 000429	NON-COLLUSION AFFIDAVIT OF CONTRACTOR
SECTION 000500	STANDARD FORM OF AGREEMENT BETWEEN OWNER & CONTRACTOR (STIPULATED SUM) (AIA DOCUMENT A101-2017)
SECTION 000520	AFFIDAVIT ACCEPTING PROVISIONS OF THE WORKMAN'S COMPENSATION ACTS
SECTION 000550	BID BOND
SECTION 000600	PERFORMANCE & PAYMENT BONDS
SECTION 000700	GENERAL CONDITIONS OF CONTRACT FOR CONSTRUCTION (AIA DOCUMENT A201-2017)
SECTION 000900	PREVAILING MINIMUM WAGE PRE-DETERMINATION
SECTION 000910	ASBESTOS REPORT
SECTION 000920	PRIME CONTRACTOR CERTIFICATION (PDE FORM G08)

DIVISION 1 – GENERAL REQUIREMENTS

SECTION 011000	SUMMARY OF WORK
SECTION 012100	ALLOWANCES
SECTION 012200	UNIT PRICES
SECTION 012300	ALTERNATES
SECTION 012500	SUBSTITUTIONS
SECTION 012600	MODIFICATION PROCEDURES
SECTION 012700	CUTTING AND PATCHING
SECTION 012800	FIELD ENGINEERING
SECTION 012900	APPLICATIONS FOR PAYMENT
SECTION 013100	PROJECT COORDINATION
SECTION 013150	PROJECT MEETINGS
SECTION 013200	CONSTRUCTION PROGRESS DOCUMENTATION
SECTION 013300	SUBMITTALS
SECTION 014000	QUALITY REQUIREMENTS
SECTION 014100	SAFETY
SECTION 015000	TEMPORARY FACILITIES & CONTROLS
SECTION 017200	PROJECT RECORD DOCUMENTS
SECTION 017700	CONTRACT CLOSEOUT
SECTION 017800	FINAL CLEANING
SECTION 017823	OPERATION & MAINTENANCE DATA
SECTION 017900	WARRANTIES

TABLE OF CONTENTS
VOLUME 2 - TECHNICAL MANUAL

DIVISION 2 – EXISTING CONDITIONS

SECTION 024119 SELECTIVE DEMOLITION

DIVISION 3 – CONCRETE

SECTION 033000 CAST IN PLACE CONCRETE

SECTION 035416 HYDRAULIC CEMENT UNDERLAYMENT

DIVISION 4 – MASONRY

SECTION 042000 UNIT MASONRY ASSEMBLIES

SECTION 047200 CAST STONE MASONRY

DIVISION 5 – METALS

SECTION 051200 STRUCTURAL STEEL FRAMING

SECTION 052100 STEEL JOINT FRAMING

SECTION 053100 STEEL DECKING

SECTION 054000 COLD-FORMED METAL FRAMING

SECTION 055000 METAL FABRICATIONS

DIVISION 6 – WOOD, PLASTICS, AND COMPOSITES

SECTION 061000 ROUGH CARPENTRY

SECTION 061600 SHEATHING

SECTION 064023 INTERIOR ARCHITECTURAL WOODWORK

SECTION 064219 PLASTIC-LAMINATE-FACED WOOD PANELING

DIVISION 7 – THERMAL AND MOISTURE PROTECTION

SECTION 071100 COMPOSITE SHEET WATERPROOFING

SECTION 072100 THERMAL INSULATION

SECTION 072119 FOAMED-IN-PLACE INSULATION

SECTION 072500 WEATHER BARRIERS

SECTION 074214 METAL SOFFIT PANELS

SECTION 074223 METAL WALL PANELS

SECTION 074243 COMPOSITE WALL PANELS

SECTION 075323 EPDM ROOFING

SECTION 076200 SHEET METAL FLASHING AND TRIM

SECTION 077200 ROOF ACCESSORIES

SECTION 079200 JOINT SEALANTS

SECTION 079500 EXPANSION CONTROL

DIVISION 8 – OPENINGS

SECTION 081113 HOLLOW METAL DOORS AND FRAMES

SECTION 081416 FLUSH WOOD DOORS

SECTION 083113 ACCESS DOORS AND FRAMES

SECTION 083313 COILING COUNTER DOORS

SECTION 083323 OVERHEAD COILING DOORS

SECTION 084113 ALUMINUM-FRAMED ENTRANCES AND STOREFRONTS

SECTION 087100 DOOR HARDWARE
SECTION 088000 GENERAL GLAZING

DIVISION 9 – FINISHES

SECTION 092216 NON-STRUCTURAL METAL FRAMING
SECTION 092236.23 METAL SUSPENSION GYPSUM BOARD CEILING SYSTEM
SECTION 092900 GYPSUM BOARD
SECTION 093000 TILING
SECTION 095113 ACOUSTICAL PANEL CEILINGS
SECTION 096513 RESILIENT BASE AND ACCESSORIES
SECTION 096519 RESILIENT TILE FLOORING
SECTION 096520 RESILIENT SHEET FLOORING
SECTION 096723 RESINOUS FLOORING
SECTION 096813 TILE CARPETING
SECTION 097200 WALL COVERINGS
SECTION 097723 FABRIC-WRAPPED PANELS
SECTION 098436 SOUND-ABSORBING CEILING BAFFLES
SECTION 099123 PAINTING
SECTION 099600 HIGH PERFORMANCE COATINGS

DIVISION 10 – SPECIALTIES

SECTION 101100 VISUAL DISPLAY UNITS
SECTION 101112 SPECIALTY BUILDING PRODUCTS
SECTION 101115 VINYL GRAPHICS
SECTION 101200 DISPLAY CASES
SECTION 101419 DIMENSIONAL LETTER SIGNAGE
SECTION 101423 PANEL SIGNS
SECTION 102113 TOILET COMPARTMENTS
SECTION 102123 CUBICAL TRACKS AND CURTAINS
SECTION 102600 WALL PROTECTION
SECTION 102800 TOILET ACCESSORIES
SECTION 104413 FIRE EXTINGUISHER CABINETS
SECTION 104416 FIRE EXTINGUISHERS
SECTION 105113 METAL LOCKERS
SECTION 107500 FLAGPOLES

DIVISION 11 – EQUIPMENT

SECTION 114000 FOOD SERVICES EQUIPMENT
SECTION 116100 THEATER AND STAGE EQUIPMENT

DIVISION 12 – FURNISHINGS

SECTION 122413 ROLLER WINDOW SHADES
SECTION 123216 EDUCATIONAL CASEWORK
SECTION 123627 LIBRARY FURNITURE
SECTION 123661 SIMULATED STONE FABRICATION

DIVISION 14 – CONVEYING EQUIPMENT

SECTION 144200 WHEELCHAIR LIFTS

DIVISION 31 – EARTHWORK

SECTION 311000 SITE CLEARING

SECTION 312000 EARTH MOVING

SECTION 312319 DEWATERING

SECTION 315000 EXCAVATION SUPPORT AND PROTECTION

DIVISION 32 – EXTERIOR IMPROVEMENTS

SECTION 321216 ASPHALT PAVING

SECTION 321313 CONCRETE PAVING

SECTION 321373 CONCRETE PAVING JOINT SEALANTS

SECTION 321726 TACTILE WARNING SURFACING

SECTION 321833 MISCELLANEOUS SITE IMPROVEMENTS

SECTION 323113 CHAIN LINK FENCES AND GATES

SECTION 329200 TURF AND GRASSES

SECTION 329300 PLANTS

SECTION 329600 TRANSPLANTING

DIVISION 33 – UTILITIES

SECTION 334100 STORM UTILITY DRAINAGE PIPING

SECTION 334200 STORMWATER CONVEYANCE

TABLE OF CONTENTS
VOLUME 3 - TECHNICAL MANUAL

DIVISION 21 - FIRE SUPPRESSION

SECTION 210010	FIRE SUPPRESSION GENERAL PROVISIONS
SECTION 210100	FIRE SUPPRESSION GENERAL EQUIPMENT
SECTION 210300	FIRE SUPPRESSION

DIVISION 22 - PLUMBING

SECTION 220010	PLUMBING GENERAL PROVISIONS
SECTION 220100	PLUMBING GENERAL EQUIPMENT
SECTION 220250	PLUMBING INSULATION
SECTION 220410	PLUMBING PIPING & SPECIALTIES
SECTION 220440	PLUMBING FIXTURES & EQUIPMENT
SECTION 220800	PLUMBING COMMISSIONING

DIVISION 23 - HEATING, VENTILATING, AND AIR-CONDITIONING(HVAC)

SECTION 230010	MECHANICAL GENERAL PROVISIONS
SECTION 230100	MECHANICAL GENERAL EQUIPMENT
SECTION 230250	MECHANICAL INSULATION
SECTION 230510	HVAC PIPING AND SPECIFICATION
SECTION 230540	HVAC PUMPS
SECTION 230545	CHEMICAL WATER TREATMENT
SECTION 230800	HVAC COMMISSIONING
SECTION 230835	HVAC EQUIPMENT
SECTION 230855	AIR HANDLING UNITS
SECTION 230860	VENTILATION EQUIPMENT
SECTION 230890	DUCTWORK SYSTEMS
SECTION 230900	ATC SYSTEMS
SECTION 230990	TESTING, ADJUSTING AND BALANCING

DIVISION 26 - ELECTRICAL

SECTION 260010	ELECTRICAL GENERAL PROVISIONS
SECTION 260060	ELECTRICAL DEMOLITION
SECTION 260180	EQUIPMENT WIRING SYSTEMS
SECTION 260513	MEDIUM VOLTAGE CABLE
SECTION 260519	ELECTRICAL POWER CONDUCTORS AND CABLES
SECTION 260520	FIRE RATED POWER CONDUCTORS
SECTION 260526	GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS
SECTION 260529	HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS
SECTION 260533	RACEWAYS AND BOXES
SECTION 260534	SURFACE RACEWAYS
SECTION 260537	LADDER TYPE CABLE TRAYS
SECTION 260543	UNDERGROUND DUCTS AND RACEWAYS FOR ELECTRICAL SYSTEMS
SECTION 260544	SLEEVES AND SLEEVE SEALS FOR ELECTRICAL RACEWAYS AND CABLING
SECTION 260553	IDENTIFICATION FOR ELECTRICAL SYSTEMS
SECTION 260573	OVERCURRENT PROTECTION DEVICE COORDINATION STUDY
SECTION 260583	UTILITY SERVICE ENTRANCE

SECTION 260620	SCHEDULES FOR ELECTRICAL DISTRIBUTION EQUIPMENT
SECTION 260650	LUMINAIRE SCHEDULES
SECTION 260800	ELECTRICAL SYSTEMS COMMISSIONING
SECTION 260924	OCCUPANCY SENSORS
SECTION 260940	DISTRIBUTED DIGITAL LIGHTING CONTROL SYSTEM
SECTION 262200	LOW VOLTAGE TRANSFORMERS
SECTION 262413	SWITCHBOARDS
SECTION 262416	PANELBOARDS
SECTION 262726	WIRING DEVICES
SECTION 262730	FLOOR BOXES AND POKE-THRU'S
SECTION 262813	FUSES
SECTION 262816	ENCLOSED SWITCHES AND CIRCUIT BREAKERS
SECTION 262900	ELECTRIC CONTROLS, PUSHBUTTONS, RELAYS AND EQUIPMENT
SECTION 262913	ENCLOSED CONTROLLERS
SECTION 263100	PHOTOVOLTAIC SYSTEM (ALTERNATE EC-2a AND EC-2b)
SECTION 263213	ENGINE GENERATORS
SECTION 263600	TRANSFER SWITCHES
SECTION 263605	DUAL PURPOSE MANUAL TRANSFER SWITCHES
SECTION 264313	DISTRIBUTION SURGE PROTECTIVE DEVICES
SECTION 265100	INTERIOR LIGHTING
SECTION 265561	THEATRICAL LIGHTING AND CONTROLS
SECTION 265600	EXTERIOR LIGHTING

DIVISION 27 - COMMUNICATIONS

SECTION 270500	COMMON WORK REQUIRED FOR COMMUNICATIONS
SECTION 271100	COMMUNICATIONS EQUIPMENT ROOM FITTINGS
SECTION 271300	COMMUNICATIONS BACKBONE CABLING
SECTION 271501	COMMUNICATIONS BACKBONE CABLING
SECTION 275132	TELEVISION SYSTEM
SECTION 275133	INTEGRATED NETWORKED ELECTRONIC COMMUNICATIONS
SECTION 275313	CLOCK SYSTEMS
SECTION 275319	DISTRIBUTED ANTENNA SYSTEM (DAS)
SECTION 277000	LOCAL AUDIO-VISUAL REINFORCEMENT SYSTEMS
SECTION 278000	AUDIO-VISUAL SUPPORT EQUIPMENT

DIVISION 28 - ELECTRONIC SAFETY AND SECURITY

SECTION 280500	COMMON WORK REQUIRED FOR ELECTRONIC SAFETY AND SECURITY
SECTION 281300	EXPANSION FOR THE EXISTING ACCESS CONTROL SYSTEM
SECTION 282300	VIDEO SURVEILLANCE SYSTEM CABLING
SECTION 282400	CAMERA-INTERCOM SYSTEM
SECTION 283110	EXPANSION OF THE EXISTING FIRE ALARM SYSTEM (ALTERNATE EC-1)
SECTION 283220	EMERGENCY COMMUNICATION SYSTEM
SECTION 285000	IN-BUILDING TWO-WAY EMERGENCY RESPONDER COMMUNICATION ENHANCEMENT SYSTEM

COPYRIGHT

All reports, construction documents, and computer files relating to this project are the property of Crabtree, Rohrbaugh & Associates. Crabtree, Rohrbaugh & Associates retains all common law, statute and other reserved rights including the copyright thereto.

Reproduction of the material herein or substantial use without written permission of Crabtree, Rohrbaugh & Associates violates the copyright laws of the United States and will be subject to legal prosecution.

©2025 Crabtree, Rohrbaugh & Associates

SECTION 000010 - ADVERTISEMENT FOR BIDS

NOTICE

Notice is hereby given that sealed bids for construction of Additions and Renovations to Coopertown Elementary School, 800 Coopertown Road, Bryn Mawr, Pennsylvania 19010 will be received at the Administrative Offices of the School District of Haverford Township, 50 East Eagle Road until **2:00 P.M., prevailing time, on Tuesday, April 8, 2025**. Bids must be submitted to the attention of Antony Testa, Business Manager. Bids shall be submitted in sealed envelopes bearing the name of the Bidder and shall be clearly marked "Additions and Renovations to Coopertown Elementary School". Bids will be publicly opened and read aloud immediately after the scheduled closing time for receipt of Bids. Bids received after the above-referenced date and time shall be returned to the Bidder unopened.

Generally, the project includes the construction of a 19,500 square feet of new additions and 65,000 square feet of renovations, for a completed 84,500 square foot facility.

Separate, sealed Bids will be received for the following Prime Contracts:

- | | |
|--------|--|
| 3758-1 | General Construction |
| 3758-2 | Heating, Ventilating and Air Conditioning Construction |
| 3758-3 | Plumbing Construction |
| 3758-4 | Electrical Construction |

On or after **Monday, March 10, 2025** Bidders may obtain bidding documents in hard copy and/or .pdf electronic format by submitting a written request for the same, together with two separate checks in the non-refundable amount(s) listed below, payable to: Crabtree, Rohrbaugh & Associates, 401 E. Winding Hill Road, Mechanicsburg, PA 17055.

- | | |
|---|----------|
| 1. Electronic .pdf Format (zero dollars) | Zero |
| 2. Hard Copy Printed Format (Three Hundred and Fifty Dollars) | \$350.00 |

The following information shall be furnished by bidders when obtaining bidding documents:

1. Bidder's mailing address
2. Name of Bidder's representative
3. Bidder's telephone number
4. Bidder's facsimile number
5. Bidder's email address (email address used to submit the .pdfs)
6. Bidding documents requested, by Contract and Contract number

Bidding documents are available for examination through the following plan houses:

Pennsylvania Builders Exchange, 1813 North Franklin Street, Pittsburgh, PA 15233
Dodge Data & Analytics, 2860 South State Hwy 161 #501, Grand Prairie, TX 75052-7361
Altoona Builders Exchange, 1927 Union Street, Altoona, PA 16601
Construct Connect, 4500 Lake Forest Drive Suite 502 Cincinnati, OH 45242
The Blue Book, 800 E. Main Street, Jefferson Valley, New York 10535
Construction Journal, 400 SW 7th Street, Stuart, FL 34994

Bidding document questions shall be directed to Crabtree, Rohrbaugh & Associates, Attention: Bidding Department, email: bidding@cra-architects.com. All questions pertaining to the Contract Documents,

technical sections, legal documents, and bid submission shall be directed in writing to: Jeff Straub AIA, Senior Project Architect, email: jstraub@cra-architects.com. In addition, all questions should be cc'd to Ken Matthews, Owner's Representative, KMatthews@cbdsi.com. All addenda will be issued directly to bidders registered with CRA Architects as plan holders and plan houses identified above. All questions shall be submitted no later than five (5) business days prior to bid opening.

Each bid shall be accompanied by bid security in an amount equal to ten percent (10%) of the Base Bid amount and all alternate bid amounts in the form of a Bid Bond as described in the Supplementary Instructions to Bidders.

A Performance Bond and a Payment Bond in the forms provided in the Project Manual, each in an amount equal to one hundred percent (100%) of the amount of the Contract, and each with satisfactory corporate surety, must be furnished by the successful Bidder prior to execution of a Contract.

Bids may not be modified, withdrawn or cancelled by the Bidder for sixty (60) calendar days following the actual date of opening thereof, except as provided by the Commonwealth Procurement Code. However, if award of Contract is delayed by the required approval of another government agency, the sale of bonds or the award of a grant or grants, Bids may not be withdrawn by the Bidder for a period not to exceed 120 days from the date of bid opening in accordance with Pennsylvania law.

School District of Haverford Township reserves the right in its sole discretion to reject any or all Bids and to waive irregularities in any Bid. Further, School District of Haverford Township reserves the right to award any combination of Alternates, or no Alternates, which in its sole discretion, serves the best interests of the School District.

A Pre-Bid Conference will be held on **Tuesday, March 18, 2025, at 11:00 AM**, prevailing time, at the Coopertown Elementary School, 800 Coopertown Road, Bryn Mawr, PA 19010.

This project is subject to the Commonwealth of Pennsylvania, Department of Labor and Industry's Prevailing Wage Pre-Determination.

Corporations seeking to bid which are organized under the laws of a State other than Pennsylvania must secure the appropriate certificate, authorizing them to conduct business within the Commonwealth.

SCHOOL DISTRICT OF HAVERFORD TOWNSHIP
Anthony Testa, Business Manager
50 East Eagle Road
Havertown, PA 19083

END OF SECTION 000010

AIA® Document A701™ – 2018

Instructions to Bidders

for the following Project:
(Name, location, and detailed description)

THE OWNER:
(Name, legal status, address, and other information)

THE ARCHITECT:
(Name, legal status, address, and other information)

TABLE OF ARTICLES

- | | |
|----------|---|
| 1 | DEFINITIONS |
| 2 | BIDDER'S REPRESENTATIONS |
| 3 | BIDDING DOCUMENTS |
| 4 | BIDDING PROCEDURES |
| 5 | CONSIDERATION OF BIDS |
| 6 | POST-BID INFORMATION |
| 7 | PERFORMANCE BOND AND PAYMENT BOND |
| 8 | ENUMERATION OF THE PROPOSED CONTRACT DOCUMENTS |

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. A vertical line in the left margin of this document indicates where the author has added necessary information and where the author has added to or deleted from the original AIA text.

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

FEDERAL, STATE, AND LOCAL LAWS MAY IMPOSE REQUIREMENTS ON PUBLIC PROCUREMENT CONTRACTS. CONSULT LOCAL AUTHORITIES OR AN ATTORNEY TO VERIFY REQUIREMENTS APPLICABLE TO THIS PROCUREMENT BEFORE COMPLETING THIS FORM.

It is intended that AIA Document G612™–2017, Owner's Instructions to the Architect, Parts A and B will be completed prior to using this document.

ARTICLE 1 DEFINITIONS

§ 1.1 Bidding Documents include the Bidding Requirements and the Proposed Contract Documents. The Bidding Requirements consist of the advertisement or invitation to bid, Instructions to Bidders, supplementary instructions to bidders, the bid form, and any other bidding forms. The Proposed Contract Documents consist of the unexecuted form of Agreement between the Owner and Contractor and that Agreement's Exhibits, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, all Addenda, and all other documents enumerated in Article 8 of these Instructions.

§ 1.2 Definitions set forth in the General Conditions of the Contract for Construction, or in other Proposed Contract Documents apply to the Bidding Documents.

§ 1.3 Addenda are written or graphic instruments issued by the Architect, which, by additions, deletions, clarifications, or corrections, modify or interpret the Bidding Documents.

§ 1.4 A Bid is a complete and properly executed proposal to do the Work for the sums stipulated therein, submitted in accordance with the Bidding Documents.

§ 1.5 The Base Bid is the sum stated in the Bid for which the Bidder offers to perform the Work described in the Bidding Documents, to which Work may be added or deleted by sums stated in Alternate Bids.

§ 1.6 An Alternate Bid (or Alternate) is an amount stated in the Bid to be added to or deducted from, or that does not change, the Base Bid if the corresponding change in the Work, as described in the Bidding Documents, is accepted.

§ 1.7 A Unit Price is an amount stated in the Bid as a price per unit of measurement for materials, equipment, or services, or a portion of the Work, as described in the Bidding Documents.

§ 1.8 A Bidder is a person or entity who submits a Bid and who meets the requirements set forth in the Bidding Documents.

§ 1.9 A Sub-bidder is a person or entity who submits a bid to a Bidder for materials, equipment, or labor for a portion of the Work.

ARTICLE 2 BIDDER'S REPRESENTATIONS

§ 2.1 By submitting a Bid, the Bidder represents that:

- .1 the Bidder has read and understands the Bidding Documents;
- .2 the Bidder understands how the Bidding Documents relate to other portions of the Project, if any, being bid concurrently or presently under construction;
- .3 the Bid complies with the Bidding Documents;
- .4 the Bidder has visited the site, become familiar with local conditions under which the Work is to be performed, and has correlated the Bidder's observations with the requirements of the Proposed Contract Documents;
- .5 the Bid is based upon the materials, equipment, and systems required by the Bidding Documents without exception; and
- .6 the Bidder has read and understands the provisions for liquidated damages, if any, set forth in the form of Agreement between the Owner and Contractor.

ARTICLE 3 BIDDING DOCUMENTS

§ 3.1 Distribution

§ 3.1.1 Bidders shall obtain complete Bidding Documents, as indicated below, from the issuing office designated in the advertisement or invitation to bid, for the deposit sum, if any, stated therein.

(Indicate how, such as by email, website, host site/platform, paper copy, or other method Bidders shall obtain Bidding Documents.)

§ 3.1.2 Any required deposit shall be refunded to Bidders who submit a bona fide Bid and return the paper Bidding Documents in good condition within ten days after receipt of Bids. The cost to replace missing or damaged paper documents will be deducted from the deposit. A Bidder receiving a Contract award may retain the paper Bidding Documents, and the Bidder's deposit will be refunded.

§ 3.1.3 Bidding Documents will not be issued directly to Sub-bidders unless specifically offered in the advertisement or invitation to bid, or in supplementary instructions to bidders.

§ 3.1.4 Bidders shall use complete Bidding Documents in preparing Bids. Neither the Owner nor Architect assumes responsibility for errors or misinterpretations resulting from the use of incomplete Bidding Documents.

§ 3.1.5 The Bidding Documents will be available for the sole purpose of obtaining Bids on the Work. No license or grant of use is conferred by distribution of the Bidding Documents.

§ 3.2 Modification or Interpretation of Bidding Documents

§ 3.2.1 The Bidder shall carefully study the Bidding Documents, shall examine the site and local conditions, and shall notify the Architect of errors, inconsistencies, or ambiguities discovered and request clarification or interpretation pursuant to Section 3.2.2.

§ 3.2.2 Requests for clarification or interpretation of the Bidding Documents shall be submitted by the Bidder in writing and shall be received by the Architect at least seven days prior to the date for receipt of Bids.
(Indicate how, such as by email, website, host site/platform, paper copy, or other method Bidders shall submit requests for clarification and interpretation.)

§ 3.2.3 Modifications and interpretations of the Bidding Documents shall be made by Addendum. Modifications and interpretations of the Bidding Documents made in any other manner shall not be binding, and Bidders shall not rely upon them.

§ 3.3 Substitutions

§ 3.3.1 The materials, products, and equipment described in the Bidding Documents establish a standard of required function, dimension, appearance, and quality to be met by any proposed substitution.

§ 3.3.2 Substitution Process

§ 3.3.2.1 Written requests for substitutions shall be received by the Architect at least ten days prior to the date for receipt of Bids. Requests shall be submitted in the same manner as that established for submitting clarifications and interpretations in Section 3.2.2.

§ 3.3.2.2 Bidders shall submit substitution requests on a Substitution Request Form if one is provided in the Bidding Documents.

§ 3.3.2.3 If a Substitution Request Form is not provided, requests shall include (1) the name of the material or equipment specified in the Bidding Documents; (2) the reason for the requested substitution; (3) a complete description of the proposed substitution including the name of the material or equipment proposed as the substitute, performance and test data, and relevant drawings; and (4) any other information necessary for an evaluation. The request shall include a statement setting forth changes in other materials, equipment, or other portions of the Work, including changes in the work of other contracts or the impact on any Project Certifications (such as LEED), that will result from incorporation of the proposed substitution.

§ 3.3.3 The burden of proof of the merit of the proposed substitution is upon the proposer. The Architect's decision of approval or disapproval of a proposed substitution shall be final.

§ 3.3.4 If the Architect approves a proposed substitution prior to receipt of Bids, such approval shall be set forth in an Addendum. Approvals made in any other manner shall not be binding, and Bidders shall not rely upon them.

§ 3.3.5 No substitutions will be considered after the Contract award unless specifically provided for in the Contract Documents.

§ 3.4 Addenda

§ 3.4.1 Addenda will be transmitted to Bidders known by the issuing office to have received complete Bidding Documents.

(Indicate how, such as by email, website, host site/platform, paper copy, or other method Addenda will be transmitted.)

§ 3.4.2 Addenda will be available where Bidding Documents are on file.

§ 3.4.3 Addenda will be issued no later than four days prior to the date for receipt of Bids, except an Addendum withdrawing the request for Bids or one which includes postponement of the date for receipt of Bids.

§ 3.4.4 Prior to submitting a Bid, each Bidder shall ascertain that the Bidder has received all Addenda issued, and the Bidder shall acknowledge their receipt in the Bid.

ARTICLE 4 BIDDING PROCEDURES

§ 4.1 Preparation of Bids

§ 4.1.1 Bids shall be submitted on the forms included with or identified in the Bidding Documents.

§ 4.1.2 All blanks on the bid form shall be legibly executed. Paper bid forms shall be executed in a non-erasable medium.

§ 4.1.3 Sums shall be expressed in both words and numbers, unless noted otherwise on the bid form. In case of discrepancy, the amount entered in words shall govern.

§ 4.1.4 Edits to entries made on paper bid forms must be initialed by the signer of the Bid.

§ 4.1.5 All requested Alternates shall be bid. If no change in the Base Bid is required, enter "No Change" or as required by the bid form.

§ 4.1.6 Where two or more Bids for designated portions of the Work have been requested, the Bidder may, without forfeiture of the bid security, state the Bidder's refusal to accept award of less than the combination of Bids stipulated by the Bidder. The Bidder shall neither make additional stipulations on the bid form nor qualify the Bid in any other manner.

§ 4.1.7 Each copy of the Bid shall state the legal name and legal status of the Bidder. As part of the documentation submitted with the Bid, the Bidder shall provide evidence of its legal authority to perform the Work in the jurisdiction where the Project is located. Each copy of the Bid shall be signed by the person or persons legally authorized to bind the Bidder to a contract. A Bid by a corporation shall further name the state of incorporation and have the corporate seal affixed. A Bid submitted by an agent shall have a current power of attorney attached, certifying the agent's authority to bind the Bidder.

§ 4.1.8 A Bidder shall incur all costs associated with the preparation of its Bid.

§ 4.2 Bid Security

§ 4.2.1 Each Bid shall be accompanied by the following bid security:

(Insert the form and amount of bid security.)

§ 4.2.2 The Bidder pledges to enter into a Contract with the Owner on the terms stated in the Bid and shall, if required, furnish bonds covering the faithful performance of the Contract and payment of all obligations arising thereunder. Should the Bidder refuse to enter into such Contract or fail to furnish such bonds if required, the amount of the bid security shall be forfeited to the Owner as liquidated damages, not as a penalty. In the event the Owner fails to comply with Section 6.2, the amount of the bid security shall not be forfeited to the Owner.

§ 4.2.3 If a surety bond is required as bid security, it shall be written on AIA Document A310™, Bid Bond, unless otherwise provided in the Bidding Documents. The attorney-in-fact who executes the bond on behalf of the surety shall affix to the bond a certified and current copy of an acceptable power of attorney. The Bidder shall provide surety bonds from a company or companies lawfully authorized to issue surety bonds in the jurisdiction where the Project is located.

§ 4.2.4 The Owner will have the right to retain the bid security of Bidders to whom an award is being considered until (a) the Contract has been executed and bonds, if required, have been furnished; (b) the specified time has elapsed so that Bids may be withdrawn; or (c) all Bids have been rejected. However, if no Contract has been awarded or a Bidder has not been notified of the acceptance of its Bid, a Bidder may, beginning days after the opening of Bids, withdraw its Bid and request the return of its bid security.

§ 4.3 Submission of Bids

§ 4.3.1 A Bidder shall submit its Bid as indicated below:

(Indicate how, such as by website, host site/platform, paper copy, or other method Bidders shall submit their Bid.)

§ 4.3.2 Paper copies of the Bid, the bid security, and any other documents required to be submitted with the Bid shall be enclosed in a sealed opaque envelope. The envelope shall be addressed to the party receiving the Bids and shall be identified with the Project name, the Bidder's name and address, and, if applicable, the designated portion of the Work for which the Bid is submitted. If the Bid is sent by mail, the sealed envelope shall be enclosed in a separate mailing envelope with the notation "SEALED BID ENCLOSED" on the face thereof.

§ 4.3.3 Bids shall be submitted by the date and time and at the place indicated in the invitation to bid. Bids submitted after the date and time for receipt of Bids, or at an incorrect place, will not be accepted.

§ 4.3.4 The Bidder shall assume full responsibility for timely delivery at the location designated for receipt of Bids.

§ 4.3.5 A Bid submitted by any method other than as provided in this Section 4.3 will not be accepted.

§ 4.4 Modification or Withdrawal of Bid

§ 4.4.1 Prior to the date and time designated for receipt of Bids, a Bidder may submit a new Bid to replace a Bid previously submitted, or withdraw its Bid entirely, by notice to the party designated to receive the Bids. Such notice shall be received and duly recorded by the receiving party on or before the date and time set for receipt of Bids. The receiving party shall verify that replaced or withdrawn Bids are removed from the other submitted Bids and not considered. Notice of submission of a replacement Bid or withdrawal of a Bid shall be worded so as not to reveal the amount of the original Bid.

§ 4.4.2 Withdrawn Bids may be resubmitted up to the date and time designated for the receipt of Bids in the same format as that established in Section 4.3, provided they fully conform with these Instructions to Bidders. Bid security shall be in an amount sufficient for the Bid as resubmitted.

§ 4.4.3 After the date and time designated for receipt of Bids, a Bidder who discovers that it made a clerical error in its Bid shall notify the Architect of such error within two days, or pursuant to a timeframe specified by the law of the jurisdiction where the Project is located, requesting withdrawal of its Bid. Upon providing evidence of such error to the reasonable satisfaction of the Architect, the Bid shall be withdrawn and not resubmitted. If a Bid is withdrawn pursuant to this Section 4.4.3, the bid security will be attended to as follows:

(State the terms and conditions, such as Bid rank, for returning or retaining the bid security.)

ARTICLE 5 CONSIDERATION OF BIDS

§ 5.1 Opening of Bids

If stipulated in an advertisement or invitation to bid, or when otherwise required by law, Bids properly identified and received within the specified time limits will be publicly opened and read aloud. A summary of the Bids may be made available to Bidders.

§ 5.2 Rejection of Bids

Unless otherwise prohibited by law, the Owner shall have the right to reject any or all Bids.

§ 5.3 Acceptance of Bid (Award)

§ 5.3.1 It is the intent of the Owner to award a Contract to the lowest responsive and responsible Bidder, provided the Bid has been submitted in accordance with the requirements of the Bidding Documents. Unless otherwise prohibited by law, the Owner shall have the right to waive informalities and irregularities in a Bid received and to accept the Bid which, in the Owner's judgment, is in the Owner's best interests.

§ 5.3.2 Unless otherwise prohibited by law, the Owner shall have the right to accept Alternates in any order or combination, unless otherwise specifically provided in the Bidding Documents, and to determine the lowest responsive and responsible Bidder on the basis of the sum of the Base Bid and Alternates accepted.

ARTICLE 6 POST-BID INFORMATION

§ 6.1 Contractor's Qualification Statement

Bidders to whom award of a Contract is under consideration shall submit to the Architect, upon request and within the timeframe specified by the Architect, a properly executed AIA Document A305™, Contractor's Qualification Statement, unless such a Statement has been previously required and submitted for this Bid.

§ 6.2 Owner's Financial Capability

A Bidder to whom award of a Contract is under consideration may request in writing, fourteen days prior to the expiration of the time for withdrawal of Bids, that the Owner furnish to the Bidder reasonable evidence that financial arrangements have been made to fulfill the Owner's obligations under the Contract. The Owner shall then furnish such reasonable evidence to the Bidder no later than seven days prior to the expiration of the time for withdrawal of Bids. Unless such reasonable evidence is furnished within the allotted time, the Bidder will not be required to execute the Agreement between the Owner and Contractor.

§ 6.3 Submittals

§ 6.3.1 After notification of selection for the award of the Contract, the Bidder shall, as soon as practicable or as stipulated in the Bidding Documents, submit in writing to the Owner through the Architect:

- .1 a designation of the Work to be performed with the Bidder's own forces;
- .2 names of the principal products and systems proposed for the Work and the manufacturers and suppliers of each; and
- .3 names of persons or entities (including those who are to furnish materials or equipment fabricated to a special design) proposed for the principal portions of the Work.

§ 6.3.2 The Bidder will be required to establish to the satisfaction of the Architect and Owner the reliability and responsibility of the persons or entities proposed to furnish and perform the Work described in the Bidding Documents.

§ 6.3.3 Prior to the execution of the Contract, the Architect will notify the Bidder if either the Owner or Architect, after due investigation, has reasonable objection to a person or entity proposed by the Bidder. If the Owner or Architect has reasonable objection to a proposed person or entity, the Bidder may, at the Bidder's option, withdraw the Bid or submit an acceptable substitute person or entity. The Bidder may also submit any required adjustment in the Base Bid or Alternate Bid to account for the difference in cost occasioned by such substitution. The Owner may accept the adjusted bid price or disqualify the Bidder. In the event of either withdrawal or disqualification, bid security will not be forfeited.

§ 6.3.4 Persons and entities proposed by the Bidder and to whom the Owner and Architect have made no reasonable objection must be used on the Work for which they were proposed and shall not be changed except with the written consent of the Owner and Architect.

ARTICLE 7 PERFORMANCE BOND AND PAYMENT BOND

§ 7.1 Bond Requirements

§ 7.1.1 If stipulated in the Bidding Documents, the Bidder shall furnish bonds covering the faithful performance of the Contract and payment of all obligations arising thereunder.

§ 7.1.2 If the furnishing of such bonds is stipulated in the Bidding Documents, the cost shall be included in the Bid. If the furnishing of such bonds is required after receipt of bids and before execution of the Contract, the cost of such bonds shall be added to the Bid in determining the Contract Sum.

§ 7.1.3 The Bidder shall provide surety bonds from a company or companies lawfully authorized to issue surety bonds in the jurisdiction where the Project is located.

§ 7.1.4 Unless otherwise indicated below, the Penal Sum of the Payment and Performance Bonds shall be the amount of the Contract Sum.

(If Payment or Performance Bonds are to be in an amount other than 100% of the Contract Sum, indicate the dollar amount or percentage of the Contract Sum.)

§ 7.2 Time of Delivery and Form of Bonds

§ 7.2.1 The Bidder shall deliver the required bonds to the Owner not later than three days following the date of execution of the Contract. If the Work is to commence sooner in response to a letter of intent, the Bidder shall, prior to commencement of the Work, submit evidence satisfactory to the Owner that such bonds will be furnished and delivered in accordance with this Section 7.2.1.

§ 7.2.2 Unless otherwise provided, the bonds shall be written on AIA Document A312, Performance Bond and Payment Bond.

§ 7.2.3 The bonds shall be dated on or after the date of the Contract.

§ 7.2.4 The Bidder shall require the attorney-in-fact who executes the required bonds on behalf of the surety to affix to the bond a certified and current copy of the power of attorney.

ARTICLE 8 ENUMERATION OF THE PROPOSED CONTRACT DOCUMENTS

§ 8.1 Copies of the proposed Contract Documents have been made available to the Bidder and consist of the following documents:

- .1 AIA Document A101™–2017, Standard Form of Agreement Between Owner and Contractor, unless otherwise stated below.
(Insert the complete AIA Document number, including year, and Document title.)
- .2 AIA Document A101™–2017, Exhibit A, Insurance and Bonds, unless otherwise stated below.
(Insert the complete AIA Document number, including year, and Document title.)
- .3 AIA Document A201™–2017, General Conditions of the Contract for Construction, unless otherwise stated below.
(Insert the complete AIA Document number, including year, and Document title.)
- .4 AIA Document E203™–2013, Building Information Modeling and Digital Data Exhibit, dated as indicated below:
(Insert the date of the E203-2013.)
- .5 Drawings

Number	Title	Date	
.6	Specifications		
	Section	Title	Date Pages
.7	Addenda:		
	Number	Date	Pages
.8	Other Exhibits: <i>(Check all boxes that apply and include appropriate information identifying the exhibit where required.)</i>		
	<input type="checkbox"/> AIA Document E204™–2017, Sustainable Projects Exhibit, dated as indicated below: <i>(Insert the date of the E204-2017.)</i>		
	<input type="checkbox"/> The Sustainability Plan:		
	Title	Date	Pages
	<input type="checkbox"/> Supplementary and other Conditions of the Contract:		
	Document	Title	Date Pages
.9	Other documents listed below: <i>(List here any additional documents that are intended to form part of the Proposed Contract Documents.)</i>		

SECTION 000101 - SUPPLEMENTARY INSTRUCTIONS TO BIDDERS

Section 000101, Supplementary Instructions to Bidders, contains modifications to the basic document, **AIA Document A701, Instructions to Bidders, 2018 Edition**, in the form of additions, deletions and substitutions. Where any part of the basic document is so modified by these Supplementary Instructions to Bidders, the unaltered provisions shall remain in effect.

ARTICLE 1 - DEFINITIONS

DELETE Paragraph 1.2 in its entirety and, in lieu thereof, SUBSTITUTE the following new Paragraph:

- 1.2 Except as provided for herein, all definitions set forth in the Conditions of the Contract (General, Supplementary and other conditions) or in other Contract documents are applicable to these Bidding Documents.

ADD the following new Subparagraph as follows:

- 1.2.1 The following words are intended to mean:

- Furnish (Materials): To supply and deliver to the Project ready for installation and in operable condition.
- Install (Services or Labor): To place in final position, complete, anchored, connected, and in operable condition.
- Provide: To furnish and install complete. When neither furnish, install, nor provide is stated, provide is implied.

ADD the following to the end of Paragraph 1.4

[Add:] “and applicable law.”

ADD the following to the end of Paragraph 1.8

[Add:] “and applicable law.”

ARTICLE 2 – BIDDER’S REPRESENTATIONS

ADD new Paragraph 2.2 as follows:

- 2.2 Bidder is required to examine carefully in detail the character of the Site of the Project, the Contract Documents and all other matters pertinent to the Work contemplated. By submitting a Bid, Bidder expressly represents that it has satisfied itself as to the conditions to be encountered, including conditions that are overhead, on the surface, and concealed; the character, quality and quantities of Work to be done and materials to be furnished; and the requirements of the Contract Documents. No allowance or concession will be made for the lack of such information. Where underground and overhead structure locations are shown, they are for the information of Architect only; their correctness is not guaranteed or warranted by Owner or Architect, and in no event is this information to be considered a

part of the Contract Documents, or to be relied upon in preparing a Bid. If this information is used by Bidder in preparing its Bid, Bidder must assume all risks resulting from conditions differing from those shown in the information provided.

Owner will, to the extent reasonably possible, afford Bidder the opportunity at Bidder's own expense, to make additional borings or soundings, to drive test piles, to dig test pits on the site of the Work, and to make measurements and studies of any kind.

There is no expressed or implied agreement that the existing conditions have been correctly indicated, and Bidders shall take into account that conditions affecting the cost or quantities of Work to be done may differ from those indicated.

Bidder shall carefully examine all Bidding Documents and materials pertinent thereto, with respect to all the categories of Work for which Owner has advertised and will receive Bids, so that it is completely aware and satisfied as to the character, quality and quantities of all Work, materials and for services required or to be provided by Bidder to perform and complete all Work of its Contract on the Project. Further, Bidder shall have carefully examined the preliminary construction schedule, including the preliminary phasing plan (if applicable) for the Work, and by submission of a Bid, represents that the time set forth for such Work is sufficient for Bidder to complete its Work.

Should Work to be performed be specified or indicated in more than one prime contract and no clarifications are received by Addendum prior to the bid date, each prime contract Bidder so affected who is submitting a Bid shall consider the Work to be part of its prime contract. A subsequent determination will be made and an amount commensurate to the Work to be performed will be deducted from the contractor determined not to be responsible.

Bidder, by submission of its Bid, represents that it has visited the site, that it has read the Bidding Documents and understands their full character and intent, and that it has otherwise complied with the provisions of Article 3, and should Owner subsequently accept its Bid, no claims, or concessions will be made, accepted, or recognized by Owner for any additional labor, equipment or materials required, or for any difficulties encountered in the Work, or for the lack of any information which could have been foreseen, apparent, or ascertained had Bidder so complied with Article 3.

Bidder shall ascertain all governmental and utility requirements with respect to wage scales, materials, labor, safety, and sanitation and shall base its Bid on full compliance therewith.

Bidder has familiarized itself with labor conditions which might affect or influence the performance of the Work.

ARTICLE 3 - BIDDING DOCUMENTS

Paragraph 3.1 - Copies:

Subparagraph 3.1.1

DELETE Subparagraph 3.1.1 in its entirety, and in lieu thereof, SUBSTITUTE the following new

Subparagraph:

- 3.1.1 Bidders may obtain complete sets of Bidding Documents from Crabtree, Rohrbaugh & Associates as stated in the Advertisement for Bids for the fee stated therein. The fee for Bidding Documents is **non-refundable**.

DELETE Subparagraph 3.1.2 in its entirety.

ADD new Sub-subparagraph 3.1.5.1 as follows:

- 3.1.5.1 Bidder agrees that all work product produced by Architect or its consultants are "Instruments of Service" as defined in AIA Document A201™-2007, General Conditions of the Contract for Construction. "Instruments of Service" include, without limitation, representations, in any medium of expression, of the tangible and intangible creative work performed by Architect and Architect's consultants under their respective professional service agreements.

Bidder agrees that for the purposes of the bid process, Architect is the copyright owner of such Instruments of Service and retains all common law, statutory and other reserved rights, including copyrights. Distribution of Instruments of Service to potential Bidders is not to be construed as publication in derogation of the reserved rights of Architect and Architect's consultants.

Architect grants to Bidder a nonexclusive, revocable license to use Architect's Instruments of Service solely and exclusively for purposes of developing Bidder's Bid, including securing information or bids from Bidder's material or equipment suppliers, contractors, or subcontractors. The license granted under this section permits Bidder or Bidder's contractors, subcontractors, sub-subcontractors and suppliers to reproduce applicable portions of the Instruments of Service solely and exclusively for use in developing its Bid for the Project. If Bidder is for any reason not awarded the Contract for the Project, the license granted in this section shall immediately terminate.

Bidder acknowledges that it shall not use the Instruments of Service for any purpose other than to prepare a Bid. The Instruments of Service shall not be used as construction drawings or for any specification involved in the construction of the Project. Bidder, for itself, and Bidder's contractors, subcontractors, sub-subcontractors and suppliers, hereby releases and holds Architect and Architect's consultant(s) harmless from all claims and causes of action arising from any use of the Instruments of Service. Bidder, to the extent permitted by law, further agrees to defend, indemnify, and hold harmless Architect and its consultants from all costs and expenses, including the cost of defense, related to claims and causes of action asserted by any third person or entity to the extent such costs and expenses arise from Bidder's use of the Instruments of Service under this Section.

Except for the licenses granted in this Section, no other license or right shall be deemed granted or implied under this Agreement. Bidder shall not assign, delegate, sublicense, pledge, or otherwise transfer any license granted herein to another party without the prior written agreement of Architect. Any unauthorized use or

reproduction of the Instruments of Service shall be at Bidder's sole risk and without liability to Architect and Architect's consultants, and subject to Architect's rights and remedies for infringement of Architect's rights, including without limitation, copyrights.

Paragraph 3.2 – Modification or Interpretation of Bidding Documents:

Subparagraph 3.2.2

ADD the following new sentences to the end of Subparagraph 3.2.2:

- 3.2.2 [Add:] "All requests for clarification or interpretation shall be made by a prime bidder and shall be in writing no later than five (5) business days prior to bid opening. Any request made by any other entity will not be addressed. Any request for clarification or interpretation via means other than in writing will not be addressed. Written requests will not be responded to directly back to Bidder. If the inquiry requires clarification to, or modification of the Contract Documents, they will be issued via Addendum. If clarification to, or modification of the Contract Documents is not required by the inquiry, the request will not be addressed."

Paragraph 3.3 – Substitutions:

DELETE Subparagraph 3.3.2 in its entirety, including all sub-subparagraphs and, in lieu thereof, SUBSTITUTE the following new Subparagraph:

- 3.3.2. **Pre-Bid substitutions will not be considered.** Following the award of contracts, substitutions proposed by the awarded Contractors will be considered in accordance with Division 1 Section "Substitutions".

DELETE Subparagraph 3.3.3 in its entirety.

DELETE Subparagraph 3.3.4 in its entirety.

DELETE Subparagraph 3.3.5 in its entirety.

Paragraph 3.4 - Addenda:

ADD new Sub-subparagraph 3.4.1.1 as follows:

- 3.4.1.1 Clarifications to the Bidding Documents will only be made in writing, by Addenda. Oral statements may not be relied upon and will not be binding or have any legal effect.

DELETE Subparagraph 3.4.3 in its entirety and, in lieu thereof, SUBSTITUTE the following new Subparagraph:

- 3.4.3 Addenda will be issued no later than two days prior to the date for receipt of Bids except an Addendum withdrawing the request for Bids or one which includes postponement of the date for receipt of Bids.

DELETE Subparagraph 3.4.4 in its entirety and, in lieu thereof, SUBSTITUTE the following new Subparagraph:

- 3.4.4 Bidder shall ascertain prior to submitting a Bid that Bidder has received all Addenda issued, and Bidder shall acknowledge, where indicated on the Bid Form, their receipt. Failure of any Bidder to receive any Addenda as provided for herein shall not release such Bidder from the obligation of their Bid.

ARTICLE 4 - BIDDING PROCEDURES

Paragraph 4.1 - Preparation of Bids:

ADD the following new sentences to the end of Subparagraph 4.1.1:

- 4.1.1 [Add:] "Attention is directed to the Bid Forms bound in the Project Manual. These forms are for the information and convenience of Bidder and are not to be detached from the Project Manual, or filled out or executed. A separate copy of each Bid Form is furnished with the Bidding Documents. Complete two (2) separate copies of the Bid Form and accompanying documents, execute, and submit as specified in the Advertisement for Bid".

ADD the following new sentence to the end of Subparagraph 4.1.5:

- 4.1.5 [Add:] "Failure to enter an amount or "No Change", or a similar designation regarding the Bid amount for a requested Alternate shall be construed to mean that no change in the Base Bid is required."

DELETE 4.1.6 in its entirety.

INSERT the following sentence after the second sentence of Subparagraph 4.1.7:

- 4.1.7 [Insert:] "The signature of any person appearing on the Bid Form, shall be in longhand and in ink."

Paragraph 4.2 - Bid Security:

ADD Subparagraph 4.2.1 as follows:

- 4.2.1 "Bid security in the amount of 10% of the Base Bid, plus all potential ADD alternates shall accompany the Bid. Bid Bonds shall be on the form set forth in the Project Manual or by certified check. Bid bonds shall name as obligee and checks shall be made payable to School District of Haverford Township. Bidders who submit security in certified check form shall be bound by the conditions set forth in the Bid Bond."

REPLACE Subparagraph 4.2.2 as follows:

- 4.2.2 The Bidder pledges that (1) the Bidder will not withdraw his/her bid for a period of sixty (60) days after the date specified for receipt of bids, (2) the Bidder will enter into a formal

Contract with the Owner; and that the Bidder will submit the required Performance, Labor and Material Payment Bonds, Public Works Employment Verification Forms, and Certificates of Insurance as specified. In the event of withdrawal of the Bid by the Bidder, the Bidder will forfeit the full amount of the Bid Bond (Guarantee).

DELETE Subparagraph 4.2.3 in its entirety and, in lieu thereof, SUBSTITUTE the following new Subparagraph:

- 4.2.3 If a Surety Bond is used for the Bid Security, it shall be written on the form set forth in the Project Manual only, and the Attorney-in-fact who executes the Bond on behalf of the Surety, shall affix to the Bond, a certified and current copy of its power of attorney.

DELETE Subparagraph 4.2.4 in its entirety, and in lieu thereof, SUBSTITUTE the following new Subparagraph:

- 4.2.4 Owner may declare the Bid Security forfeited to Owner as liquidated damages if, following the designation within the firm-bid period of Bidder as the apparently lowest responsible Bidder, such Bidder shall thereafter, following receipt of Notice of Intent to Award, fail to (1) deliver to Owner within the prescribed time the properly executed Performance Bond, and Payment Bond, required insurance certificates, and completed Public Works Employment Verification Forms. and properly executed counterparts of the construction Agreement. The Bid Security of all Bidders will be returned (unless previously forfeited as aforesaid) upon (1) the execution of the construction Agreement by Owner, (2) the rejection by Owner of all Bids or (3) the expiration of the firm-bid period, including any extensions by operation of law or by mutual consent of Owner and the apparently lowest responsible Bidder.

Paragraph 4.3 - Submission of Bids:

ADD the following new sentence to the end of Subparagraph 4.3.2 as follows:

- 4.3.2 [Add:] "Owner shall not be responsible for the opening of Bids not submitted in compliance with these Instructions to Bidders or Supplementary Instructions to Bidders."

ADD new Subparagraph 4.3.6 as follows:

- 4.3.6 [Add:] The documents to be submitted with the Bid are as follows:
1. Two (2) Original Bid Form
 2. One (1) Bid Security
 3. Two (2) Non-Collusion Affidavit
 4. Two (2) Affidavit Accepting Provisions of the Workman's Compensation Acts
 5. Two (2) Contractor's Qualification Statement, AIA Document A305

ADD new Subparagraph 4.3.7 as follows:

- 4.3.7 [Add:] Owner reserves the right to waive non-material defects, informalities or irregularities in any and all Bids and to reject all bids if it deems that doing so is in the Owner's best interests.

Paragraph 4.4 - Modification or Withdrawal of Bid:

DELETE Subparagraph 4.4.1 in its entirety and, in lieu thereof, SUBSTITUTE the following new Subparagraph:

- 4.4.1 A Bidder may withdraw its Bid at any time up to the scheduled time for opening of Bids. The withdrawal of a Bid prior to the deadline for bidding may occur only by appearing in person, by First-Class mail, or by fax or email. A Bid may not be modified after the deadline for submittal. After the deadline for submittal, no Bid may be withdrawn except as permitted by Pennsylvania law.

MODIFY the first sentence of Subparagraph 4.4.2 by adding the following to the end of the sentence:

- 4.4.2 [Modify:] “..... and these Bidding Documents.”

DELETE Subparagraph 4.4.3 in its entirety and, in lieu thereof, SUBSTITUTE the following new Subparagraph:

- 4.4.3 Bids may not be withdrawn by Bidder for a period not to exceed sixty (60) calendar days following the actual date of opening thereof, except in strict accordance with the Pennsylvania Bid Withdrawal Law. However, if award of Contracts is delayed by a required approval of another government agency, the sale of bonds or the award of a grant or grants, a Bid may not be withdrawn by Bidder for a period not to exceed 120 days from the date of Bid opening in accordance with Pennsylvania Law.

ARTICLE 5 -CONSIDERATION OF BIDS

Paragraph 5.1 - Opening of Bids:

DELETE the first part of the first sentence of Paragraph 5.1 up to and including “or when otherwise required by law,” and begin this sentence as follows:

- 5.1 “Bids properly identified and received

Paragraph 5.2 - Rejection of Bids:

ADD new Subparagraph 5.2.1 as follows:

- 5.2.1 Owner reserves the right to reject any or all Bids for one or more Contracts, or parts thereof, or items therein. Owner reserves the right to disqualify Bids, before or after opening, upon evidence of collusion with intent to defraud or other illegal practices upon the part of Bidder, or by other means permissible under applicable law.

Paragraph 5.3 - Acceptance of Bid Award:

Add to the end of existing Subparagraph 5.3.1 as follows:

- 5.3.1 Owner, before making an award, may require any Bidder, upon at least three (3) days request to present satisfactory evidence, in the form specified by Owner, of their

experience, qualifications, financial ability, and other matters reasonably related to their ability to satisfactorily perform and complete the Work covered by their Bid.

Owner reserves the right to consider such matters, facts and circumstances presented by Bidder, as shall be permitted by Pennsylvania law, in making a determination whether Bidder is a responsible Bidder. Owner reserves the right to request such other information or data as they may deem necessary to evaluate the qualifications of Bidder to satisfactorily perform the functions of Contractor.

With its Bid, Bidder must submit a Contractor's Qualification Statement (AIA Document A305), which shall include a listing of a minimum of three (3) Pennsylvania public school projects completed within the past seven (7) years of a minimum Contract value equal to or greater than the Bid amount of this Project. Also, provide names and numbers for the Superintendent, the Principal, the Construction Manager (if applicable) and Architect for all public school projects completed within the past seven (7) years.

Contractor's Qualification Statement shall be supplemented by listing any principal, officer or shareholder in your company who has either owned, operated, or who was affiliated with any other business in a management capacity, under a different name. List the name of the business and provide a Contractor's Qualification Statement for such business.

ADD new Subparagraphs as follows:

5.3.3 After review of Bids, during the Bid period stipulated in Article 4.4.1, at its sole discretion, Owner may issue a Notice of Intent to Award. Upon receipt of Notice of Intent to Award, Contractor shall, within seven (7) calendar days, deliver to Owner (by delivery to Architect) the following:

1. Performance and Payment Bonds as set forth in the Contract Documents and Article 7 of the Instructions to Bidders.
2. Insurance Certificates, policies or other evidence of insurance set forth in the Contract Documents.
3. An executed Pennsylvania Public Works Verification Form
4. Post Bid Information required in Article 6 of these Instructions to Bidders.

Failure of Bidder to whom Notice of Intent to Award has been given to deliver the above items required by the Contract Documents, within seven (7) calendar days, shall constitute grounds for Owner to declare Bidder's Bid Security forfeited.

Upon receipt of the documents listed above, Owner may at its sole discretion, award the Contract. A written Notice to Proceed will be issued to establish the start of the Contract duration.

5.3.4

When a Unit Price is rejected by Owner, any additional work that would have been subject to that unit price shall be subject to Article 7 of the General Conditions of the Contract for Construction.

ARTICLE 6 - POST BID INFORMATION

DELETE Paragraph 6.2 - Owner's Financial Capability, in its entirety._

DELETE Paragraph 6.3.3

DELETE Paragraph 6.3.4

ARTICLE 7 - PERFORMANCE BOND AND PAYMENT BOND

Paragraph 7.1 - Bond Requirements:

DELETE Subparagraph 7.1.1 in its entirety and, in lieu thereof, SUBSTITUTE the following new Subparagraph:_

- 7.1.1 Prior to execution of the Contract, the successful Bidder shall furnish bonds covering the faithful performance of the Contract and the payment of all obligations arising thereunder in the forms included in the Project Manual and each in an amount equal to 100% of the Contract Sum. The Performance Bond shall remain in force and effect until Contractor's Work has been finally accepted. Bidder shall pay all premiums with respect to such bonds.

DELETE Subparagraph 7.1.2 in its entirety._

DELETE Subparagraph 7.1.3 in its entirety, and in lieu thereof, SUBSTITUTE the following new Subparagraph:

- 7.1.3 Bonds shall be secured from a surety company as stipulated in Division 0 Section "Supplementary General Conditions".

Paragraph 7.2 - Time of Delivery and Form of Bonds:

DELETE Subparagraph 7.2.1 in its entirety and, in lieu thereof, SUBSTITUTE the following new Subparagraph:

- 7.2.1 Bidder shall deliver properly executed bonds to Owner (by delivery to Architect) no later than seven (7) days after written Notice of Intent to Award is issued.

DELETE Subparagraph 7.2.2 in its entirety and, in lieu thereof, SUBSTITUTE the following new Subparagraph:_

- 7.2.2 Bonds shall be written on the Performance Bond form and the Payment Bond form included in the Contract Documents for the amount required in the Contract Documents.
 - 7.2.2.1 The Contract Bonds shall be written in the form included in the Project Manual and the Bonds shall be executed by or on behalf of the successful Bidder, as Principal, in the following manner:
 - 7.2.2.2 If the successful Bidder is an individual, the Contract Bonds shall be executed by them personally, their signature shall be witnessed, and any trade name employed in the conduct of their business shall be stated.
 - 7.2.2.3 If the successful Bidder is a partnership, the Contract Bonds shall be executed in the

name of the partnership by each of the Partners, and the signatures of the Partners shall be witnessed.

- 7.2.2.4 If the successful Bidder is a corporation, the Contract Bonds shall be executed in the name of the corporation: (1) by the President or a Vice President and attested by the Secretary or Assistant Secretary and the Corporate Seal shall be attached; (2) by a duly authorized agent of the corporation whose authority to act, as of the date of the Contract Bonds, shall be established by proof, satisfactory to Owner, attached to the Contract Bonds.
- 7.2.2.5 Execute the Contract Bonds on behalf of the surety in such manner as to legally bind the surety. In the event the execution on behalf of the surety is by an agent or agents, a proper power of attorney, evidencing the authority of such agent or agents, shall be attached to the Contract Bonds. Such power of attorney shall bear the same date as the Contract Bonds to which it is attached.
- 7.2.2.6 Surety companies executing bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state where the project is located.

ARTICLE 8 – ENUMERATION OF THE PROPOSED CONTRACT DOCUMENTS

Replace 8.1 in its entirety with: See list of Contract Documents set forth in the General Conditions.

ARTICLE 9 CONSTRUCTION TIME

ADD new Article 9 as follows:

Paragraph 9.1 - Pre-Bid Conference:

- 9.1.1 Prospective Bidders and Sub-bidders are invited to attend a Pre-Bid Conference at the time and location stated in the Advertisement for Bids during which questions of general and technical nature and other matters regarding the Construction Documents may be raised by those in attendance and discussed with Owner, Architect, and Engineers.

Paragraph 9.2 - Pre-Construction Conference:

- 9.2.1 Soon after the award of the Contract but prior to the start of construction, Contractor or their representative shall attend a Pre-Construction Conference with representatives of Owner and Architect. The conference will serve to acquaint the participants with the general plan of Contract administration and requirements under which the construction operation is to proceed and will inform Contractor, in detail, of the obligations imposed on them and their subcontractors by the Executive Orders concerning Equal Employment Opportunity.

- 9.2.2 The date, time and place of the conference will be furnished to Contractor by Architect.

Paragraph 9.3- Contract Time:

- 9.3.1 The Agreement will include a stipulation that the Work be substantially complete (as defined in the Contract) within **444** calendar days, and that completion of ALL punch list work and Final Acceptance of the Work be achieved within **504** calendar days. In addition, all prime contractors shall be required to meet milestone dates identified in the Phasing Plans PH1.1 and as detailed in Specification 013200 Construction Progress Documentation paragraph 1.7.

Paragraph 9.4- Time of Completion:

- 9.4.1 Bidder agrees that they will commence work within forty-eight (48) hours following receipt of Notice to Proceed from Owner (which may be given by Architect pursuant to authority granted by Owner) and shall be substantially completed within the number of calendar days set forth herein.
- 9.4.2 By submitting a Bid, Bidder for General Construction, certifies that they shall coordinate the schedule for construction of the Project with all other prime contractors as selected in these specifications including, but not limited to, preparing and updating the Schedule, holding weekly coordination meetings with all prime contractors and submitting a copy of the minutes of those meetings to Architect on a weekly basis.
- 9.4.3 All other prime contractors, by submitting a Bid, certify that they shall coordinate their Work with General Contractor and shall attend the weekly coordination meetings as scheduled by General Contractor.
- 9.4.4 By submitting a Bid, each prime contractor certifies that the Contract Time set forth herein is sufficient for such prime contractor to complete its work.

Paragraph 9.5- Non-Interference with Owner's Operations:

- 9.5.1 Contractor shall schedule their work accordingly and shall cooperate with Owner to see that daily operations are disrupted as little as possible. No Work shall begin until it is fully coordinated with Owner so that Owner can make provisions to allow for the disruption that the Work will cause. Owner shall be given at least five (5) days' notice before any work is to be started. This notice shall be in writing.
- 9.5.2 The General Contractor shall erect temporary barriers to segregate the area of new construction from the existing facility and the remainder of Owner's property. It is the intention that these temporary barriers be constructed to prevent the flow of dust, dirt, debris, etc., into the adjacent areas of the facility. The temporary barriers must also serve as safety barriers to prevent access by unauthorized people into the work area.
- 9.5.3 Contractor must maintain access to Owner's facilities for employees, visitors, other users and deliveries. In no way shall Contractor prevent access to the remaining portions of the site.

ARTICLE 10 - GOVERNING LAWS AND REGULATIONS

ADD new Article 10 as follows:

Paragraph 10.1 – Governing Laws and Regulations

- 10.1.1 Bidder's attention is directed to the fact that all applicable Federal and State laws, municipal ordinances and codes, and the rules and regulations of all authorities having jurisdiction over construction of the Project may apply to this Contract, including without limitation, Pennsylvania's Prevailing Wage Act.

Paragraph 10.2 Anti-Pollution Legislation

- 10.3.1 On October 26, 1972, House Bill Number 1969 was enacted into law. This Act (No. 247) became effective on November 25, 1972. It requires that Bidders on construction contracts for the Commonwealth of Pennsylvania be advised of those provisions of Federal and State statutes, rules and regulations dealing with the prevention of environmental pollution and the preservation of public natural resources that affect the Project on which bids are being received.
- 10.3.2 Bidder shall thoroughly acquaint itself with the terms of the listed statutes, rules, and regulations. No separate or additional payment will be made for such compliance. In the event that the listed statutes, rules and regulations are amended or if new statutes, rules, or regulations become effective after the date of receipt of Bids, upon receipt of documentation which causes Contractor to perform additional Work, Owner may issue a Change Order or deviation request setting forth the additional Work that must be undertaken. This change order or deviation request shall not invalidate the Contract.
- 10.3.3 It is the responsibility of Contractor to determine what local ordinances, if any, will affect the Work. They shall check for any county, city, borough, or township rules or regulations applicable to the area in which the Project is being constructed and, in addition, for any rules or regulations of other organizations having jurisdiction, such as chambers-of-commerce, planning commissions, industries, or utility companies who have jurisdiction over lands which Contractor occupies. Any costs of compliance with local controls shall be included in the Bid, even though documents of such local controlling agencies are not listed herein.

END OF SECTION 000101

BID FORM - GENERAL CONSTRUCTION - CONTRACT 3758 -1

DATED: _____
(Bidder to insert date bid submitted)

Bidder's Name | Address (Print or Type)

Antony Testa | Business Manager

School District of Haverford Township

50 East Eagle Road

Havertown, PA 19083

POC Email Address

POC Phone Number

To Whom It May Concern:

This Bid is submitted in accordance with your Advertisement inviting Bids to be received for the General Construction Work for Additions and Renovations to Coopertown Elementary School, School District of Haverford Township, Havertown, PA.

Having carefully examined the Contract Documents as defined in Article 1 of the Agreement, bound in the Specifications, and including the Addenda enumerated in the Bid, which are incorporated with these documents indicating various conditions affecting this Contract, the undersigned herein agrees to furnish all materials, perform all labor and do all else necessary to complete the Contract for the above named Project in accordance with said Contract Documents for:

Total Base Bid Project Cost for All General Construction

_____ DOLLARS

(\$ _____).

The above-referenced amount is inclusive of all allowances required by Unit Price Specification 012200.

Accompanying this Bid is a certified check, or Bid Bond required by the Instructions to Bidders which is deposited as a bid guarantee and is to be retained by you and applied as provided in the Instructions to Bidders in case the undersigned shall default in its obligations following receipt of a Notice of Intent to Award.

The undersigned hereby certifies that this Bid is genuine, and is not a sham or collusive, or made in the interest of, or on behalf of any person, firm or corporation not herein named, and that the undersigned has not directly or indirectly induced or solicited any bidder to refrain from bidding and that the undersigned has not in any manner sought by collusion to secure for itself, any advantages over any other bidder.

The undersigned, intending to be legally bound, agrees that this Bid shall be irrevocable and shall remain subject to your acceptance for 60 days after the date set for bid opening, except as provided by the Commonwealth Procurement Code, which provides for possible extensions of the holding period.

It is understood that the School District of Haverford Township reserves the right to reject any or all Bids or Proposals, or parts thereof, or items thereof, and to waive technicalities required for the best interests of the Owner.

The undersigned submits this Bid with the full knowledge of the Contract requirements and hereby agrees that Work of the Project, under this Contract shall be **substantially completed within 444 calendar days, and final acceptance of the Work, including completion of all punch list work, shall be attained within 504 calendar days in addition, contractor shall be required to attain milestone dates detailed in Phasing Plans Drawing PH1.1 and as detailed in Specification 013200 Construction Progress Documentation paragraph 1.7.** Substantial completion of each of the project phases by the dates designated in the Contract Documents are considered milestones to the overall schedule and are subject to the provisions of Article 8 - "Time" of the AIA A201 General Conditions of the Contract for Construction. **The contract durations stated herein shall be the essence of the Contract.**

The Bidder agrees that it will not assign its Bid or any of its rights or interests hereunder without written consent of the Owner.

THE BID FORM AND THE FOLLOWING ATTACHMENTS SHALL BE SUBMITTED:

1. One (1) Bid Security
2. Two (2) Non-Collusion Affidavit
3. Two (2) Agreement by Vendor or Independent Contractor to Comply with Act 34 of 1986 and Act 151 of 1995 (as amended)
4. Two (2) Affidavit Accepting Provisions of the Workman's Compensation Acts
5. Two (2) Contractor's Qualification Statement (AIA Document A305)

ALTERNATES: The Instructions to Bidders and the Contract Documents comprising the plans and specifications, and all documents bound therewith, together with all Addenda thereto, shall apply to all Alternate Bids as listed in Division 1 Section "Alternates", and as listed below:

GC-1	Haverford District Office Renovation	ADD	\$	_____
GC-2	Parking Overlay	ADD	\$	_____

UNIT PRICES: The Instructions to Bidders and the Contract Documents comprising the plans and specifications, and all documents bound therewith, together with all Addenda thereto, shall apply to all Unit Prices as listed in Division 1 Section "Unit Prices", and as listed below:

GC-1	Bulk Soil Excavation	\$ _____	CY
GC-2	Borrow Soil Replacement	\$ _____	CY
GC-3	Trench Rock Removal	\$ _____	CY
GC-4	Bulk Rock Removal	\$ _____	CY
GC-5	Cutting and Patching of Concrete Floor Slabs	\$ _____	SF
GC-6	Floor Leveler	\$ _____	SF
GC-7	General Laborer	\$ _____	/hr.
GC-8	Carpenter Journeyman Labor	\$ _____	/hr.
GC-9	Journeyman Painter Class 2 Labor	\$ _____	/hr.
GC-10	Access Panels	\$ _____	/panel
GC-11	Curb Replacement	\$ _____	/LF
GC-12	Sidewalk Replacement	\$ _____	/SF
GC-13	Replace Existing Door Frame	\$ _____	/Door Frame

The Owner reserves the right to accept or reject any and all Unit Prices stipulated on the Bid Form.

ADDENDA

The undersigned hereby acknowledge receipt of following Addenda and has prepared this bid accordingly:

ADDENDUM # _____	Dated _____	ADDENDUM # _____	Dated _____
ADDENDUM # _____	Dated _____	ADDENDUM # _____	Dated _____

Bids shall be officially signed in accordance with the Instructions to Bidders, using the applicable portion of the "Signature Pages".

SIGNATURES

IN WITNESS WHEREOF, the undersigned has caused this Bid to be executed as of the day and year indicated on the first page hereof.

For Individual Bidder

Name of Bidder (Printed)

Witness By: _____
(Signature of Individual)

Trading and doing business as * _____

Business Address _____

*If a fictitious or trade name is employed in the conduct of business, insert name here:

Next, complete, by deletion as appropriate, the following statement:

Foregoing fictitious or trade name (has) (has not) been registered by the individual proprietorship under Pennsylvania Law.

SIGNATURES

IN WITNESS WHEREOF, the undersigned has caused this Bid to be executed as of the day and year indicated on the first page hereof.

For Partnership Bidder

(Name of Partnership)

Name of General Partner (Printed)

Witness

By: _____
(Signature of General Partner)

Business Address _____

The Partners constituting the Partnership herein named are:

Partner _____ Address _____

Partner _____ Address _____

Partner _____ Address _____

Partner _____ Address _____

[Add additional lines for the names and addresses of additional Partners, if there are more than four Partners in the Partnership, by attaching an additional page or pages to this Bid.]

*If a fictitious or trade name is employed by the Partnership in conduct of its business, insert name here:

Next, complete, by deletion as appropriate, the following statement:

Foregoing fictitious or trade name (has) (has not) been registered by the partnership under Pennsylvania Law.

SIGNATURES

IN WITNESS WHEREOF, the undersigned has caused this Bid to be executed as of the day and year indicated on the first page hereof.

For Corporate Bidder

(Name of Corporation)

By: _____	Attest: _____
Signature of President, Vice President, or other authorized representative *	Signature of Secretary, Assistant Secretary, Treasurer, Assistant Treasurer or other authorized representative **

(CORPORATE SEAL)

Business Address _____

- * If a representative other than the President or a Vice President of the Corporation signs this Bid on its behalf, then attach a valid corporate resolution or other appropriate proof, dated prior to or as of the date of the Bid, evidencing authority to execute this Bid on behalf of the Corporation.
- ** If a representative other than the Secretary, an Assistant Secretary, the Treasurer or an Assistant Treasurer attests to the signature of the corporate representative, then attach a valid corporate resolution or other appropriate proof, dated prior to or as of the date of the Bid, evidencing authority to attest to the execution of this Bid on behalf of the Corporation.

(1) Complete the following statement:

The Corporation has been organized and is existing under laws of the State/Commonwealth of _____

(2) If the Corporation has been organized under laws of a State other than those of the Commonwealth of Pennsylvania, complete, by deletion as appropriate, the following statement:

The Corporation (has) (has not) been granted a certificate of authority to do business in the Commonwealth of Pennsylvania under applicable laws.

(3) If the Corporation has been organized under laws other than those of the Commonwealth of Pennsylvania and has NOT been granted a certificate of authority, complete, by deletion as appropriate, the following statement:

The Corporation (has) (has not) applied for a certificate of authority to do business in the Commonwealth of Pennsylvania and (has) (has not) attached a copy of the pending application to this Bid.

SIGNATURES

IN WITNESS WHEREOF, the undersigned has caused this Bid to be executed as of the day and year indicated on the first page hereof.

For Limited Liability Company (LLC) Bidder

[Name of Contractor]

(Print Name of Limited Liability Company)

Attest: _____ By: _____
Signature of an authorized representative* Signature of an authorized representative**

* The individual attesting verifies and represents that the person whose signature is affixed to this Bid on behalf of the Limited Liability Company (LLC) is duly authorized in accordance with the representations hereafter set forth.

** Check the box which applies to this Bid:

- ☐ The Certificate of Organization provides that the LLC is to be managed by managers, and this Bid has been executed by a Manager fully authorized by the Certificate, by the Operating Agreement and by Resolutions of the LLC. Copies of the relevant documents are provided with the Bid or can be provided upon request within three (3) working days.
- ☐ The Certificate of Organization does not provide that LLC is to be managed by managers, and this Bid has been executed by a Member fully authorized by the Certificate, by the Operating Agreement and by Resolutions of the LLC. Copies of the relevant documents are provided with the Bid or can be provided upon request within three (3) working days.
- ☐ This Bid has been executed by a representative of the LLC who is not a Manager or a Member of the LLC, and instead who holds the office of _____ (insert title), and the execution of this Bid is fully authorized by the Certificate, by the Operating Agreement and by Resolutions of the LLC. Copies of the relevant documents are provided with the Bid or can be provided upon request within three (3) working days.

The Bidder and the individuals signing and attesting to the execution of this document further represent that (1) execution of the Bid is carrying on business in the usual way; (2) the LLC authorizes the execution of this Bid even if execution and submission of this Bid is not carrying on business in the usual way for the LLC; and (3) to the best of the individuals' information and belief, the Owner has no knowledge of the Member's or the Manager's lack of actual authority, or of any applicable and relevant restriction on his or her authority.

Continued on next page

Complete the following statement:

The LLC has been organized and is existing under laws of the State/Commonwealth of:

If the LLC has been organized under laws of a State other than those of the Commonwealth of Pennsylvania, complete, by deletion as appropriate, the following statement:

The LLC (has) (has not) been granted a certificate of authority to do business in the Commonwealth of Pennsylvania under applicable laws.

If the LLC has been organized under laws other than those of the Commonwealth of Pennsylvania and has NOT been granted a certificate of authority, complete, by deletion as appropriate, the following statement:

The LLC (has) (has not) applied for a certificate of authority to do business in the Commonwealth of Pennsylvania and (has) (has not) attached a copy of the pending application to this Bid.

BID FORM - HVAC CONSTRUCTION - CONTRACT 3758-2

DATED: _____
(Bidder to insert date bid submitted)

Bidder's Name | Address (Print or Type)

Antony Testa | Business Manager

School District of Haverford Township

50 East Eagle Road

Havertown, PA 19083

POC Email Address

POC Phone Number

To Whom It May Concern:

This Bid is submitted in accordance with your Advertisement inviting Bids to be received for the HVAC Construction Work for the HVAC Construction Work for Additions and Renovations to Coopertown Elementary School, School District of Haverford Township, Havertown, PA.

Having carefully examined the Contract Documents as defined in Article 1 of the Agreement, bound in the Specifications, and including the Addenda enumerated in the Bid, which are incorporated with these documents indicating various conditions affecting this Contract, the undersigned herein agrees to furnish all materials, perform all labor and do all else necessary to complete the Contract for the above named Project in accordance with said Contract Documents for:

Total Base Bid Project Cost for All HVAC Construction

_____ DOLLARS

(\$_____).

The above-referenced amount is inclusive of all allowances required by Unit Price Specification 012200.

Accompanying this Bid is a certified check, or Bid Bond required by the Instructions to Bidders which is deposited as a bid guarantee and is to be retained by you and applied as provided in the Instructions to Bidders in case the undersigned shall default in its obligations following receipt of a Notice of Intent to Award.

The undersigned hereby certifies that this Bid is genuine, and is not a sham or collusive, or made in the interest of, or on behalf of any person, firm or corporation not herein named, and that the undersigned has not directly or indirectly induced or solicited any bidder to refrain from bidding and that the undersigned has not in any manner sought by collusion to secure for itself, any advantages over any other bidder.

The undersigned, intending to be legally bound, agrees that this Bid shall be irrevocable and shall remain subject to your acceptance for 60 days after the date set for bid opening, except as provided by the Commonwealth Procurement Code, which provides for possible extensions of the holding period.

It is understood that the School District of Haverford Township reserves the right to reject any or all Bids or Proposals, or parts thereof, or items thereof, and to waive technicalities required for the best interests of the Owner.

The undersigned submits this Bid with the full knowledge of the Contract requirements and hereby agrees that Work of the Project, under this Contract shall be **substantially completed within 444 calendar days, and final acceptance of the Work, including completion of all punch list work, shall be attained within 504 calendar days in addition, contractor shall be required to attain milestone dates detailed in Phasing Plans Drawing PH1.1.** Substantial completion of each of the project phases by the dates designated in the Contract Documents are considered milestones to the overall schedule and are subject to the provisions of Article 8 - "Time" of the AIA A201 General Conditions of the Contract for Construction. **The contract durations stated herein shall be the essence of the Contract.**

The Bidder agrees that it will not assign its Bid or any of its rights or interests hereunder without written consent of the Owner.

THE BID FORM AND THE FOLLOWING ATTACHMENTS SHALL BE SUBMITTED:

- | | | |
|----|---------|--|
| 1. | One (1) | Bid Security |
| 2. | Two (2) | Non-Collusion Affidavit |
| 3. | Two (2) | Agreement by Vendor or Independent Contractor to Comply with Act 34 of 1986 and Act 151 of 1995 (as amended) |
| 4. | Two (2) | Affidavit Accepting Provisions of the Workman's Compensation Acts |
| 5. | Two (2) | Contractor's Qualification Statement (AIA Document A305) |

ALTERNATES: The Instructions to Bidders and the Contract Documents comprising the plans and specifications, and all documents bound therewith, together with all Addenda thereto, shall apply to all Alternate Bids as listed in Division 1 Section "Alternates", and as listed below:

NOT USED

UNIT PRICES: The Instructions to Bidders and the Contract Documents comprising the plans and specifications, and all documents bound therewith, together with all Addenda thereto, shall apply to all Unit Prices as listed in Division 1 Section "Unit Prices", and as listed below:

The Owner reserves the right to accept or reject any and all Unit Prices stipulated on the Bid Form.

HC-1	¾" Copper Heating Water Piping	\$	_____	LF
HC-2	1" Copper Heating Water Piping	\$	_____	LF
HC-3	2" Copper Heating Water Piping	\$	_____	LF
HC-4	¾" Copper Chilled Water Piping	\$	_____	LF
HC-5	1" Copper Chilled Water Piping	\$	_____	LF
HC-6	2" Copper Chilled Water Piping	\$	_____	LF
HC-7	4" Black Steel Piping	\$	_____	LF
HC-8	6" Black Steel Piping	\$	_____	LF
HC-9	1" Ball Valve	\$	_____	EA
HC-10	2" Ball Valve	\$	_____	EA
HC-11	4" Ball Valve	\$	_____	EA
HC-12	DDC Actuator	\$	_____	EA
HC-13	DDC Damper Actuator	\$	_____	EA
HC-14	DDC Sensors	\$	_____	EA
HC-15	Ductwork	\$	_____	/lb.
HC-16	Pipe Fitter Journeyman	\$	_____	/hr.
HC-17	Sheet Metal Journeyman	\$	_____	/hr.

ADDENDA

The undersigned hereby acknowledge receipt of following Addenda and has prepared this bid accordingly:

ADDENDUM # _____	Dated _____	ADDENDUM # _____	Dated _____
ADDENDUM # _____	Dated _____	ADDENDUM # _____	Dated _____

Bids shall be officially signed in accordance with the Instructions to Bidders, using the applicable portion of the "Signature Pages".

SIGNATURES

IN WITNESS WHEREOF, the undersigned has caused this Bid to be executed as of the day and year indicated on the first page hereof.

For Individual Bidder

Name of Bidder (Printed)

Witness

By: _____
(Signature of Individual)

Trading and doing business as _____

Business Address _____

*If a fictitious or trade name is employed in the conduct of business, insert name here:

Next, complete, by deletion as appropriate, the following statement:

Foregoing fictitious or trade name (has) (has not) been registered by the individual proprietorship under Pennsylvania Law.

SIGNATURES

IN WITNESS WHEREOF, the undersigned has caused this Bid to be executed as of the day and year indicated on the first page hereof.

For Partnership Bidder

(Name of Partnership)

Name of General Partner (Printed)

Witness

By: _____
(Signature of General Partner)

Business Address _____

The Partners constituting the Partnership herein named are:

Partner	Address
Partner	Address
Partner	Address
Partner	Address

[Add additional lines for the names and addresses of additional Partners, if there are more than four Partners in the Partnership, by attaching an additional page or pages to this Bid.]

*If a fictitious or trade name is employed by the Partnership in conduct of its business, insert name here:

Next, complete, by deletion as appropriate, the following statement:

Foregoing fictitious or trade name (has) (has not) been registered by the partnership under Pennsylvania Law.

SIGNATURES

IN WITNESS WHEREOF, the undersigned has caused this Bid to be executed as of the day and year indicated on the first page hereof.

For Corporate Bidder

(Name of Corporation)

By: _____
Signature of President, Vice President,
or other authorized representative

Attest: _____
Signature of Secretary, Assistant Secretary,
Treasurer, Assistant Treasurer or other authorized
representative **

(CORPORATE SEAL)

Business Address _____

- * If a representative other than the President or a Vice President of the Corporation signs this Bid on its behalf, then attach a valid corporate resolution or other appropriate proof, dated prior to or as of the date of the Bid, evidencing authority to execute this Bid on behalf of the Corporation.
- ** If a representative other than the Secretary, an Assistant Secretary, the Treasurer or an Assistant Treasurer attests to the signature of the corporate representative, then attach a valid corporate resolution or other appropriate proof, dated prior to or as of the date of the Bid, evidencing authority to attest to the execution of this Bid on behalf of the Corporation.

(1) Complete the following statement:

The Corporation has been organized and is existing under laws of the State/Commonwealth of

(2) If the Corporation has been organized under laws of a State other than those of the Commonwealth of Pennsylvania, complete, by deletion as appropriate, the following statement:

The Corporation (has) (has not) been granted a certificate of authority to do business in the Commonwealth of Pennsylvania under applicable laws.

(3) If the Corporation has been organized under laws other than those of the Commonwealth of Pennsylvania and has NOT been granted a certificate of authority, complete, by deletion as appropriate, the following statement:

The Corporation (has) (has not) applied for a certificate of authority to do business in the Commonwealth of Pennsylvania and (has) (has not) attached a copy of the pending application to this Bid.

SIGNATURES

IN WITNESS WHEREOF, the undersigned has caused this Bid to be executed as of the day and year indicated on the first page hereof.

For Limited Liability Company (LLC) Bidder

[Name of Contractor]

(Print Name of Limited Liability Company)

Attest: _____
Signature of an authorized representative*

By: _____
Signature of an authorized representative**

* The individual attesting verifies and represents that the person whose signature is affixed to this Bid on behalf of the Limited Liability Company (LLC) is duly authorized in accordance with the representations hereafter set forth.

** Check the box which applies to this Bid:

- ☐ The Certificate of Organization provides that the LLC is to be managed by managers, and this Bid has been executed by a Manager fully authorized by the Certificate, by the Operating Agreement and by Resolutions of the LLC. Copies of the relevant documents are provided with the Bid or can be provided upon request within three (3) working days.
- ☐ The Certificate of Organization does not provide that LLC is to be managed by managers, and this Bid has been executed by a Member fully authorized by the Certificate, by the Operating Agreement and by Resolutions of the LLC. Copies of the relevant documents are provided with the Bid or can be provided upon request within three (3) working days.
- ☐ This Bid has been executed by a representative of the LLC who is not a Manager or a Member of the LLC, and instead who holds the office of _____ (insert title), and the execution of this Bid is fully authorized by the Certificate, by the Operating Agreement and by Resolutions of the LLC. Copies of the relevant documents are provided with the Bid or can be provided upon request within three (3) working days.

The Bidder and the individuals signing and attesting to the execution of this document further represent that (1) execution of the Bid is carrying on business in the usual way; (2) the LLC authorizes the execution of this Bid even if execution and submission of this Bid is not carrying on business in the usual way for the LLC; and (3) to the best of the individuals' information and belief, the Owner has no knowledge of the Member's or the Manager's lack of actual authority, or of any applicable and relevant restriction on his or her authority.

Continued on next page

Complete the following statement:

The LLC has been organized and is existing under laws of the State/Commonwealth of:

If the LLC has been organized under laws of a State other than those of the Commonwealth of Pennsylvania, complete, by deletion as appropriate, the following statement:

The LLC (has) (has not) been granted a certificate of authority to do business in the Commonwealth of Pennsylvania under applicable laws.

If the LLC has been organized under laws other than those of the Commonwealth of Pennsylvania and has NOT been granted a certificate of authority, complete, by deletion as appropriate, the following statement:

The LLC (has) (has not) applied for a certificate of authority to do business in the Commonwealth of Pennsylvania and (has) (has not) attached a copy of the pending application to this Bid.

BID FORM - PLUMBING CONSTRUCTION - CONTRACT 3758-3

DATED: _____
(Bidder to insert date bid submitted)

Bidder's Name | Address (Print or Type)

Antony Testa | Business Manager

School District of Haverford Township

50 East Eagle Road

Havertown, PA 19083

POC Email Address

POC Phone Number

To Whom It May Concern:

This Bid is submitted in accordance with your Advertisement inviting Bids to be received for the Plumbing Construction Work for the Plumbing Construction Work for Additions and Renovations to Coopertown Elementary School, School District of Haverford Township, Havertown, PA.

Having carefully examined the Contract Documents as defined in Article 1 of the Agreement, bound in the Specifications, and including the Addenda enumerated in the Bid, which are incorporated with these documents indicating various conditions affecting this Contract, the undersigned herein agrees to furnish all materials, perform all labor and do all else necessary to complete the Contract for the above named Project in accordance with said Contract Documents for:

Total Base Bid Project Cost for All Plumbing Construction

_____ DOLLARS

(\$_____).

The above-referenced amount is inclusive of all allowances required by Unit Price Specification 012200.

Accompanying this Bid is a certified check, or Bid Bond required by the Instructions to Bidders which is deposited as a bid guarantee and is to be retained by you and applied as provided in the Instructions to Bidders in case the undersigned shall default in its obligations following receipt of a Notice of Intent to Award.

The undersigned hereby certifies that this Bid is genuine, and is not a sham or collusive, or made in the interest of, or on behalf of any person, firm or corporation not herein named, and that the undersigned has not directly or indirectly induced or solicited any bidder to refrain from bidding and that the undersigned has not in any manner sought by collusion to secure for itself, any advantages over any other bidder.

The undersigned, intending to be legally bound, agrees that this Bid shall be irrevocable and shall remain subject to your acceptance for 60 days after the date set for bid opening, except as provided by the Commonwealth Procurement Code, which provides for possible extensions of the holding period.

It is understood that the School District of Haverford Township reserves the right to reject any or all Bids or Proposals, or parts thereof, or items thereof, and to waive technicalities required for the best interests of the Owner.

The undersigned submits this Bid with the full knowledge of the Contract requirements and hereby agrees that Work of the Project, under this Contract shall be **substantially completed within 444 calendar days, and final acceptance of the Work, including completion of all punch list work, shall be attained within 504 calendar days in addition, contractor shall be required to attain milestone dates detailed in Phasing Plans Drawing PH1.1.** Substantial completion of each of the project phases by the dates designated in the Contract Documents are considered milestones to the overall schedule and are subject to the provisions of Article 8 - "Time" of the AIA A201 General Conditions of the Contract for Construction. **The contract durations stated herein shall be the essence of the Contract.**

The Bidder agrees that it will not assign its Bid or any of its rights or interests hereunder without written consent of the Owner.

THE BID FORM AND THE FOLLOWING ATTACHMENTS SHALL BE SUBMITTED IN DUPLICATE:

- | | |
|------------|---|
| 1. One (1) | Bid Security |
| 2. Two (2) | Non-Collusion Affidavit |
| 3. Two (2) | Affidavit Accepting Provisions of the Workman's Compensation Acts |
| 4. Two (2) | Contractor's Qualification Statement (AIA Document A305) |

ALTERNATES: The Instructions to Bidders and the Contract Documents comprising the plans and specifications, and all documents bound therewith, together with all Addenda thereto, shall apply to all Alternate Bids as listed in Division 1 Section "Alternates", and as listed below:

NOT USED

UNIT PRICES: The Instructions to Bidders and the Contract Documents comprising the plans and specifications, and all documents bound therewith, together with all Addenda thereto, shall apply to all Unit Prices as listed in Division 1 Section "Unit Prices", and as listed below:

PC-1	Bulk Soil Excavation	\$	_____	CY
PC-2	Borrow Soil Replacement	\$	_____	CY
PC-3	Trench Rock Removal	\$	_____	CY
PC-4	Bulk Rock Removal	\$	_____	CY
PC-5	½" Domestic Water Pipe	\$	_____	LF
PC-6	2" Domestic Water Pipe	\$	_____	LF
PC-7	½" Ball Valves	\$	_____	EA
PC-8	2" Ball Valves	\$	_____	EA
PC-9	2" Sanitary Pipe	\$	_____	LF
PC-10	4" Sanitary Pipe	\$	_____	LF
PC11	Natural Gas Pipe	\$	_____	LF
PC-12	Plumbing Journeyman	\$	_____	/hr.

The Owner reserves the right to accept or reject any and all Unit Prices stipulated on the Bid Form.

ADDENDA

The undersigned hereby acknowledge receipt of following Addenda and has prepared this bid accordingly:

ADDENDUM # _____	Dated _____	ADDENDUM # _____	Dated _____
ADDENDUM # _____	Dated _____	ADDENDUM # _____	Dated _____

Bids shall be officially signed in accordance with the Instructions to Bidders, using the applicable portion of the "Signature Pages".

SIGNATURES

IN WITNESS WHEREOF, the undersigned has caused this Bid to be executed as of the day and year indicated on the first page hereof.

For Individual Bidder

Name of Bidder (Printed)

Witness By: _____
(Signature of Individual)

Trading and doing business as _____

Business Address _____

*If a fictitious or trade name is employed in the conduct of business, insert name here:

Next, complete, by deletion as appropriate, the following statement:

Foregoing fictitious or trade name (has) (has not) been registered by the individual proprietorship under Pennsylvania Law.

SIGNATURES

IN WITNESS WHEREOF, the undersigned has caused this Bid to be executed as of the day and year indicated on the first page hereof.

For Partnership Bidder

(Name of Partnership)

Name of General Partner (Printed)

Witness

By: _____
(Signature of General Partner)

Business Address _____

The Partners constituting the Partnership herein named are:

Partner _____ Address _____

Partner _____ Address _____

Partner _____ Address _____

Partner _____ Address _____

[Add additional lines for the names and addresses of additional Partners, if there are more than four Partners in the Partnership, by attaching an additional page or pages to this Bid.]

*If a fictitious or trade name is employed by the Partnership in conduct of its business, insert name here:

Next, complete, by deletion as appropriate, the following statement:

Foregoing fictitious or trade name (has) (has not) been registered by the partnership under Pennsylvania Law.

SIGNATURES

IN WITNESS WHEREOF, the undersigned has caused this Bid to be executed as of the day and year indicated on the first page hereof.

For Corporate Bidder

(Name of Corporation)

By: _____	Attest: _____
Signature of President, Vice President, other authorized representative *	Signature of Secretary, Assistant Secretary, or Treasurer, Assistant Treasurer or other authorized representative**

(CORPORATE SEAL)

Business Address _____

- * If a representative other than the President or a Vice President of the Corporation signs this Bid on its behalf, then attach a valid corporate resolution or other appropriate proof, dated prior to or as of the date of the Bid, evidencing authority to execute this Bid on behalf of the Corporation.
- ** If a representative other than the Secretary, an Assistant Secretary, the Treasurer or an Assistant Treasurer attests to the signature of the corporate representative, then attach a valid corporate resolution or other appropriate proof, dated prior to or as of the date of the Bid, evidencing authority to attest to the execution of this Bid on behalf of the Corporation.

(1) Complete the following statement:

The Corporation has been organized and is existing under laws of the State/Commonwealth of _____

(2) If the Corporation has been organized under laws of a State other than those of the Commonwealth of Pennsylvania, complete, by deletion as appropriate, the following statement:

The Corporation (has) (has not) been granted a certificate of authority to do business in the Commonwealth of Pennsylvania under applicable laws.

(3) If the Corporation has been organized under laws other than those of the Commonwealth of Pennsylvania and has NOT been granted a certificate of authority, complete, by deletion as appropriate, the following statement:

The Corporation (has) (has not) applied for a certificate of authority to do business in the Commonwealth of Pennsylvania and (has) (has not) attached a copy of the pending application to this Bid.

SIGNATURES

IN WITNESS WHEREOF, the undersigned has caused this Bid to be executed as of the day and year indicated on the first page hereof.

For Limited Liability Company (LLC) Bidder

[Name of Contractor]

(Print Name of Limited Liability Company)

Attest: _____
Signature of an authorized representative*

By: _____
Signature of an authorized representative**

* The individual attesting verifies and represents that the person whose signature is affixed to this Bid on behalf of the Limited Liability Company (LLC) is duly authorized in accordance with the representations hereafter set forth.

** Check the box which applies to this Bid:

- ☐ The Certificate of Organization provides that the LLC is to be managed by managers, and this Bid has been executed by a Manager fully authorized by the Certificate, by the Operating Agreement and by Resolutions of the LLC. Copies of the relevant documents are provided with the Bid or can be provided upon request within three (3) working days.
- ☐ The Certificate of Organization does not provide that LLC is to be managed by managers, and this Bid has been executed by a Member fully authorized by the Certificate, by the Operating Agreement and by Resolutions of the LLC. Copies of the relevant documents are provided with the Bid or can be provided upon request within three (3) working days.
- ☐ This Bid has been executed by a representative of the LLC who is not a Manager or a Member of the LLC, and instead who holds the office of _____ (insert title), and the execution of this Bid is fully authorized by the Certificate, by the Operating Agreement and by Resolutions of the LLC. Copies of the relevant documents are provided with the Bid or can be provided upon request within three (3) working days.

The Bidder and the individuals signing and attesting to the execution of this document further represent that (1) execution of the Bid is carrying on business in the usual way; (2) the LLC authorizes the execution of this Bid even if execution and submission of this Bid is not carrying on business in the usual way for the LLC; and (3) to the best of the individuals' information and belief, the Owner has no knowledge of the Member's or the Manager's lack of actual authority, or of any applicable and relevant restriction on his or her authority.

Continued on next page

Complete the following statement:

The LLC has been organized and is existing under laws of the State/Commonwealth of:

If the LLC has been organized under laws of a State other than those of the Commonwealth of Pennsylvania, complete, by deletion as appropriate, the following statement:

The LLC (has) (has not) been granted a certificate of authority to do business in the Commonwealth of Pennsylvania under applicable laws.

If the LLC has been organized under laws other than those of the Commonwealth of Pennsylvania and has NOT been granted a certificate of authority, complete, by deletion as appropriate, the following statement:

The LLC (has) (has not) applied for a certificate of authority to do business in the Commonwealth of Pennsylvania and (has) (has not) attached a copy of the pending application to this Bid.

BID FORM - ELECTRICAL CONSTRUCTION - CONTRACT 3758-4

DATED: _____

(Bidder to insert date bid submitted)

Bidder's Name | Address *(Print or Type)*

Antony Testa | Business Manager

School District of Haverford Township

50 East Eagle Road

Havertown, PA 19083

POC Email Address

POC Phone Number

To Whom It May Concern:

This Bid is submitted in accordance with your Advertisement inviting Bids to be received for the Electrical Construction Work for the Electrical Construction Work for Additions and Renovations to Coopertown Elementary School, School District of Haverford Township, Havertown, PA.

Having carefully examined the Contract Documents as defined in Article 1 of the Agreement, bound in the Specifications, and including the Addenda enumerated in the Bid, which are incorporated with these documents indicating various conditions affecting this Contract, the undersigned herein agrees to furnish all materials, perform all labor and do all else necessary to complete the Contract for the above named Project in accordance with said Contract Documents for:

Total Base Bid Project Cost for All Electrical Construction

_____ DOLLAR
S

(\$ _____).

The above-referenced amount is inclusive of all allowances required by Unit Price Specification 012200.

Accompanying this Bid is a certified check, or Bid Bond required by the Instructions to Bidders which is deposited as a bid guarantee and is to be retained by you and applied as provided in the Instructions to Bidders in case the undersigned shall default in its obligations following receipt of a Notice of Intent to Award..

The undersigned hereby certifies that this Bid is genuine, and is not a sham or collusive, or made in the interest of, or on behalf of any person, firm or corporation not herein named, and that the undersigned has not directly or indirectly induced or solicited any bidder to refrain from bidding and that the undersigned has not in any manner sought by collusion to secure for itself, any advantages over any other

bidder.

The undersigned, intending to be legally bound, agrees that this Bid shall be irrevocable and shall remain subject to your acceptance for 60 days after the date set for bid opening, except as provided by the Commonwealth Procurement Code, which provides for possible extensions of the holding period.

It is understood that the School District of Haverford Township reserves the right to reject any or all Bids or Proposals, or parts thereof, or items thereof, and to waive technicalities required for the best interests of the Owner.

The undersigned submits this Bid with the full knowledge of the Contract requirements and hereby agrees that Work of the Project, under this Contract shall be **substantially completed within 444 calendar days, and final acceptance of the Work, including completion of all punch list work, shall be attained within 504 calendar days in addition, contractor shall be required to attain milestone dates detailed in Phasing Plans Drawing PH1.1.** Substantial completion of each of the project phases by the dates designated in the Contract Documents are considered milestones to the overall schedule and are subject to the provisions of Article 8 - "Time" of the AIA A201 General Conditions of the Contract for Construction. **The contract durations stated herein shall be the essence of the Contract.**

The Bidder agrees that it will not assign its Bid or any of its rights or interests hereunder without written consent of the Owner.

THE BID FORM AND THE FOLLOWING ATTACHMENTS SHALL BE SUBMITTED:

1. One (1) Bid Security
2. Two (2) Non-Collusion Affidavit
3. Two (2) Affidavit Accepting Provisions of the Workman's Compensation Acts
4. Two (2) Contractor's Qualification Statement (AIA Document A305)

ALTERNATES: The Instructions to Bidders and the Contract Documents comprising the plans and specifications, and all documents bound therewith, together with all Addenda thereto, shall apply to all Alternate Bids as listed in Division 1 Section "Alternates", and as listed below:

EC-1	Haverford Middle School Cafeteria Addition	ADD	\$	_____
EC-2	NOT USED			
EC-3	129.6 KW Roof Mounted Photovoltaic Array	ADD	\$	_____
EC-4	Switchboard, Generator, Transfer Switch and Various Panels	ADD	\$	_____

UNIT PRICES: The Instructions to Bidders and the Contract Documents comprising the plans and specifications, and all documents bound therewith, together with all Addenda thereto, shall apply to all Unit Prices as listed in Division 1 Section "Unit Prices", and as listed below:

The Owner reserves the right to accept or reject any and all Unit Prices stipulated on the Bid Form.

EC-1	Duplex Receptacle and Wiring	\$	_____	EA
EC-2	Exit Sign & Wiring	\$	_____	EA
EC-3	Light Fixture & Wiring	\$	_____	EA
EC-4	Light Fixture & Wiring	\$	_____	EA
EC-5	Heat or Smoke Detector & Wiring	\$	_____	EA
EC-6	Duct Detector & Wiring	\$	_____	EA
EC-7	Fire Alarm Pull Station & Wiring	\$	_____	EA
EC-8	Fire Alarm Audible/Visual Device & Wiring	\$	_____	EA
EC-9	Intercom Speaker and Wiring	\$	_____	EA
EC-10	Secondary Clock and Wiring	\$	_____	EA
EC-11	Data Outlets and Wiring	\$	_____	EA
EC-12	Video Surveillance Outlet and Wiring	\$	_____	EA
EC-13	Electrical Journeyman	\$	_____	/hr.

ADDENDA

The undersigned hereby acknowledge receipt of following Addenda and has prepared this bid accordingly:

ADDENDUM # _____	Dated _____	ADDENDUM # _____	Dated _____
ADDENDUM # _____	Dated _____	ADDENDUM # _____	Dated _____

Bids shall be officially signed in accordance with the Instructions to Bidders, using the applicable portion of the "Signature Pages".

SIGNATURES

IN WITNESS WHEREOF, the undersigned has caused this Bid to be executed as of the day and year indicated on the first page hereof.

For Individual Bidder

—

Name of Bidder (Printed)

Witness By: _____
(Signature of Individual)

Trading and doing business as * _____

Business Address _____

*If a fictitious or trade name is employed in the conduct of business, insert name here:

Next, complete, by deletion as appropriate, the following statement:

Foregoing fictitious or trade name (has) (has not) been registered by the individual proprietorship under Pennsylvania Law.

SIGNATURES

IN WITNESS WHEREOF, the undersigned has caused this Bid to be executed as of the day and year indicated on the first page hereof.

For Partnership Bidder

* _____

(Name of Partnership)

Name of General Partner (Printed)

_____ By: _____

Witness

(Signature of General Partner)

Business

Address _____

The Partners constituting the Partnership herein named are:

Partner _____ Address _____

Partner _____ Address _____

Partner _____ Address _____

Partner _____ Address _____

[Add additional lines for the names and addresses of additional Partners, if there are more than four Partners in the Partnership, by attaching an additional page or pages to this Bid.]

*If a fictitious or trade name is employed by the Partnership in conduct of its business, insert name here:

Next, complete, by deletion as appropriate, the following statement:

Foregoing fictitious or trade name (has) (has not) been registered by the partnership under Pennsylvania Law.

SIGNATURES

IN WITNESS WHEREOF, the undersigned has caused this Bid to be executed as of the day and year indicated on the first page hereof.

For Corporate Bidder

(Name of Corporation)

By: _____ Attest: _____

Signature of President, Vice President,
or other authorized representative *

Signature of Secretary, Assistant Secretary,
Treasurer, Assistant Treasurer or other
authorized representative **

(CORPORATE SEAL)

Business
Address _____

- * If a representative other than the President or a Vice President of the Corporation signs this Bid on its behalf, then attach a valid corporate resolution or other appropriate proof, dated prior to or as of the date of the Bid, evidencing authority to execute this Bid on behalf of the Corporation.
- ** If a representative other than the Secretary, an Assistant Secretary, the Treasurer or an Assistant Treasurer attests to the signature of the corporate representative, then attach a valid corporate resolution or other appropriate proof, dated prior to or as of the date of the Bid, evidencing authority to attest to the execution of this Bid on behalf of the Corporation.

(1) Complete the following statement:

The Corporation has been organized and is existing under laws of the State/Commonwealth of

(2) If the Corporation has been organized under laws of a State other than those of the Commonwealth of Pennsylvania, complete, by deletion as appropriate, the following statement:

The Corporation (has) (has not) been granted a certificate of authority to do business in the Commonwealth of Pennsylvania under applicable laws.

(3) If the Corporation has been organized under laws other than those of the Commonwealth of Pennsylvania and has NOT been granted a certificate of authority, complete, by deletion as appropriate, the following statement:

The Corporation (has) (has not) applied for a certificate of authority to do business in the Commonwealth of Pennsylvania and (has) (has not) attached a copy of the pending application to this Bid.

SIGNATURES

IN WITNESS WHEREOF, the undersigned has caused this Bid to be executed as of the day and year indicated on the first page hereof.

For Limited Liability Company (LLC) Bidder

[Name of Contractor]

—

(Print Name of Limited Liability Company)

Attest: _____ By: _____

—
Signature of an authorized representative*

Signature of an authorized representative**

* The individual attesting verifies and represents that the person whose signature is affixed to this Bid on behalf of the Limited Liability Company (LLC) is duly authorized in accordance with the representations hereafter set forth.

** Check the box which applies to this Bid:

- ☐ The Certificate of Organization provides that the LLC is to be managed by managers, and this Bid has been executed by a Manager fully authorized by the Certificate, by the Operating Agreement and by Resolutions of the LLC. Copies of the relevant documents are provided with the Bid or can be provided upon request within three (3) working days.
- ☐ The Certificate of Organization does not provide that LLC is to be managed by managers, and this Bid has been executed by a Member fully authorized by the Certificate, by the Operating Agreement and by Resolutions of the LLC. Copies of the relevant documents are provided with the Bid or can be provided upon request within three (3) working days.
- ☐ This Bid has been executed by a representative of the LLC who is not a Manager or a Member of the LLC, and instead who holds the office of _____ (insert title), and the execution of this Bid is fully authorized by the Certificate, by the Operating Agreement and by Resolutions of the LLC. Copies of the relevant documents are provided with the Bid or can be provided upon request within three (3) working days.

The Bidder and the individuals signing and attesting to the execution of this document further represent that (1) execution of the Bid is carrying on business in the usual way; (2) the LLC authorizes the execution of this Bid even if execution and submission of this Bid is not carrying on business in the usual way for the LLC; and (3) to the best of the individuals' information and belief, the Owner has no knowledge of the Member's or the Manager's lack of actual authority, or of any applicable and relevant restriction on his or her authority.

Continued on next page

Complete the following statement:

The LLC has been organized and is existing under laws of the State/Commonwealth of:

If the LLC has been organized under laws of a State other than those of the Commonwealth of Pennsylvania, complete, by deletion as appropriate, the following statement:

The LLC (has) (has not) been granted a certificate of authority to do business in the Commonwealth of Pennsylvania under applicable laws.

If the LLC has been organized under laws other than those of the Commonwealth of Pennsylvania and has NOT been granted a certificate of authority, complete, by deletion as appropriate, the following statement:

The LLC (has) (has not) applied for a certificate of authority to do business in the Commonwealth of Pennsylvania and (has) (has not) attached a copy of the pending application to this Bid.

AIA® Document A305® – 2020

Contractor's Qualification Statement

THE PARTIES SHOULD EXECUTE A SEPARATE CONFIDENTIALITY AGREEMENT IF THEY INTEND FOR ANY OF THE INFORMATION IN THIS A305-2020 TO BE HELD CONFIDENTIAL.

SUBMITTED BY: _____ **SUBMITTED TO:** _____
(Organization name and address.) (Organization name and address.)

TYPE OF WORK TYPICALLY PERFORMED

(Indicate the type of work your organization typically performs, such as general contracting, construction manager as constructor services, HVAC contracting, electrical contracting, plumbing contracting, or other.)

THIS CONTRACTOR'S QUALIFICATION STATEMENT INCLUDES THE FOLLOWING:
(Check all that apply.)

- ☐ Exhibit A – General Information
- ☐ Exhibit B – Financial and Performance Information
- ☐ Exhibit C – Project-Specific Information
- ☐ Exhibit D – Past Project Experience
- ☐ Exhibit E – Past Project Experience (Continued)

CONTRACTOR CERTIFICATION

The undersigned certifies under oath that the information provided in this Contractor's Qualification Statement is true and sufficiently complete so as not to be misleading.

Organization's Authorized Representative
Signature

Date

Printed Name and Title

NOTARY

State of:

County of:

Signed and sworn to before me this _____ day of _____

Notary Signature

My commission expires: _____

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. A vertical line in the left margin of this document indicates where the author has added necessary information and where the author has added to or deleted from the original AIA text.

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

AIA Document A305® – 2020 Exhibit A

General Information

This Exhibit is part of the Contractor's Qualification Statement, submitted by _____ and dated the _____ day of _____ in the year _____.
(In words, indicate day, month and year.)

§ A.1 ORGANIZATION

§ A.1.1 Name and Location

§ A.1.1.1 Identify the full legal name of your organization.

§ A.1.1.2 List all other names under which your organization currently does business and, for each name, identify jurisdictions in which it is registered to do business under that trade name.

§ A.1.1.3 List all prior names under which your organization has operated and, for each name, indicate the date range and jurisdiction in which it was used.

§ A.1.1.4 Identify the address of your organization's principal place of business and list all office locations out of which your organization conducts business. If your organization has multiple offices, you may attach an exhibit or refer to a website.

§ A.1.2 Legal Status

§ A.1.2.1 Identify the legal status under which your organization does business, such as sole proprietorship, partnership, corporation, limited liability corporation, joint venture, or other.

- .1** If your organization is a corporation, identify the state in which it is incorporated, the date of incorporation, and its four highest-ranking corporate officers and their titles, as applicable.
- .2** If your organization is a partnership, identify its partners and its date of organization.
- .3** If your organization is individually owned, identify its owner and date of organization.

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. A vertical line in the left margin of this document indicates where the author has added necessary information and where the author has added to or deleted from the original AIA text.

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

- .4** If the form of your organization is other than those listed above, describe it and identify its individual leaders:

§ A.1.2.2 Does your organization own, in whole or in part, any other construction-related businesses? If so, identify and describe those businesses and specify percentage of ownership.

§ A.1.3 Other Information

§ A.1.3.1 How many years has your organization been in business?

§ A.1.3.2 How many full-time employees work for your organization?

§ A.1.3.3 List your North American Industry Classification System (NAICS) codes and titles. Specify which is your primary NAICS code.

§ A.1.3.4 Indicate whether your organization is certified as a governmentally recognized special business class, such as a minority business enterprise, woman business enterprise, service disabled veteran owned small business, woman owned small business, small business in a HUBZone, or a small disadvantaged business in the 8(a) Business Development Program. For each, identify the certifying authority and indicate jurisdictions to which such certification applies.

§ A.2 EXPERIENCE

§ A.2.1 Complete Exhibit D to describe up to four projects, either completed or in progress, that are representative of your organization's experience and capabilities.

§ A.2.2 State your organization's total dollar value of work currently under contract.

§ A.2.3 Of the amount stated in Section A.2.2, state the dollar value of work that remains to be completed:

§ A.2.4 State your organization's average annual dollar value of construction work performed during the last five years.

§ A.3 CAPABILITIES

§ A.3.1 List the categories of work that your organization typically self-performs.

§ A.3.2 Identify qualities, accreditations, services, skills, or personnel that you believe differentiate your organization from others.

§ A.3.3 Does your organization provide design collaboration or pre-construction services? If so, describe those services.

§ A.3.4 Does your organization use building information modeling (BIM)? If so, describe how your organization uses BIM and identify BIM software that your organization regularly uses.

§ A.3.5 Does your organization use a project management information system? If so, identify that system.

§ A.4 REFERENCES

§ A.4.1 Identify three client references:

(Insert name, organization, and contact information)

§ A.4.2 Identify three architect references:

(Insert name, organization, and contact information)

§ A.4.3 Identify one bank reference:

(Insert name, organization, and contact information)

§ A.4.4 Identify three subcontractor or other trade references:

(Insert name, organization, and contact information)



AIA Document A305® – 2020 Exhibit B

Financial and Performance Information

This Exhibit is part of the Contractor's Qualification Statement, submitted by and dated the day of in the year
(In words, indicate day, month and year.)

§ B.1 FINANCIAL

§ B.1.1 Federal tax identification number:

§ B.1.2 Attach financial statements for the last three years prepared in accordance with Generally Accepted Accounting Principles, including your organization's latest balance sheet and income statement. Also, indicate the name and contact information of the firm that prepared each financial statement.

§ B.1.3 Has your organization, its parent, or a subsidiary, affiliate, or other entity having common ownership or management, been the subject of any bankruptcy proceeding within the last ten years?

§ B.1.4 Identify your organization's preferred credit rating agency and identification information.

(Identify rating agency, such as Dun and Bradstreet or Equifax, and insert your organization's identification number or other method of searching your organization's credit rating with such agency.)

§ B.2 DISPUTES AND DISCIPLINARY ACTIONS

§ B.2.1 Are there any pending or outstanding judgments, arbitration proceedings, bond claims, or lawsuits against your organization, its parent, or a subsidiary, affiliate, or other entity having common ownership or management, or any of the individuals listed in Exhibit A, Section 1.2, in which the amount in dispute is more than \$75,000?

(If the answer is yes, provide an explanation.)

§ B.2.2 In the last five years has your organization, its parent, or a subsidiary, affiliate, or other entity having common ownership or management:

(If the answer to any of the questions below is yes, provide an explanation.)

.1 failed to complete work awarded to it?

.2 been terminated for any reason except for an owners' convenience?

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. A vertical line in the left margin of this document indicates where the author has added necessary information and where the author has added to or deleted from the original AIA text.

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

.3 had any judgments, settlements, or awards pertaining to a construction project in which your organization was responsible for more than \$75,000?

.4 filed any lawsuits or requested arbitration regarding a construction project?

§ B.2.3 In the last five years, has your organization, its parent, or a subsidiary, affiliate, or other entity having common ownership or management; or any of the individuals listed in Exhibit A Section 1.2:
(If the answer to any of the questions below is yes, provide an explanation.)

.1 been convicted of, or indicted for, a business-related crime?

.2 had any business or professional license subjected to disciplinary action?

.3 been penalized or fined by a state or federal environmental agency?



AIA Document A305® – 2020 Exhibit C

Project Specific Information

This Exhibit is part of the Contractor's Qualification Statement, submitted by and dated the day of in the year
(In words, indicate day, month and year.)

PROJECT:

(Name and location or address.)

CONTRACTOR'S PROJECT OFFICE:

(Identify the office out of which the contractor proposes to perform the work for the Project.)

TYPE OF WORK SOUGHT

(Indicate the type of work you are seeking for this Project, such as general contracting, construction manager as constructor, design-build, HVAC subcontracting, electrical subcontracting, plumbing subcontracting, etc.)

CONFLICT OF INTEREST

Describe any conflict of interest your organization, its parent, or a subsidiary, affiliate, or other entity having common ownership or management, or any of the individuals listed in Exhibit A Section 1.2, may have regarding this Project.

§ C.1 PERFORMANCE OF THE WORK

§ C.1.1 When was the Contractor's Project Office established?

§ C.1.2 How many full-time field and office staff are respectively employed at the Contractor's Project Office?

§ C.1.3 List the business license and contractor license or registration numbers for the Contractor's Project Office that pertain to the Project.

§ C.1.4 Identify key personnel from your organization who will be meaningfully involved with work on this Project and indicate (1) their position on the Project team, (2) their office location, (3) their expertise and experience, and (4) projects similar to the Project on which they have worked.

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. A vertical line in the left margin of this document indicates where the author has added necessary information and where the author has added to or deleted from the original AIA text.

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

§ C.1.5 Identify portions of work that you intend to self-perform on this Project.

§ C.1.6 To the extent known, list the subcontractors you intend to use for major portions of work on the Project.

§ C.2 EXPERIENCE RELATED TO THE PROJECT

§ C.2.1 Complete Exhibit D to describe up to four projects performed by the Contractor's Project Office, either completed or in progress, that are relevant to this Project, such as projects in a similar geographic area or of similar project type. If you have already completed Exhibit D, but want to provide further examples of projects that are relevant to this Project, you may complete Exhibit E.

§ C.2.2 State the total dollar value of work currently under contract at the Contractor's Project Office:

§ C.2.3 Of the amount stated in Section C.2.2, state the dollar value of work that remains to be completed:

§ C.2.4 State the average annual dollar value of construction work performed by the Contractor's Project Office during the last five years.

§ C.2.5 List the total number of projects the Contractor's Project Office has completed in the last five years and state the dollar value of the largest contract the Contractor's Project Office has completed during that time.

§ C.3 SAFETY PROGRAM AND RECORD

§ C.3.1 Does the Contractor's Project Office have a written safety program?

§ C.3.2 List all safety-related citations and penalties the Contractor's Project Office has received in the last three years.

§ C.3.3 Attach the Contractor's Project Office's OSHA 300a Summary of Work-Related Injuries and Illnesses form for the last three years.

§ C.3.4 Attach a copy of your insurance agent's verification letter for your organization's current workers' compensation experience modification rate and rates for the last three years.

§ C.4 INSURANCE

§ C.4.1 Attach current certificates of insurance for your commercial general liability policy, umbrella insurance policy, and professional liability insurance policy, if any. Identify deductibles or self-insured retentions for your commercial general liability policy.

§ C.4.2 If requested, will your organization be able to provide property insurance for the Project written on a builder's risk "all-risks" completed value or equivalent policy form and sufficient to cover the total value of the entire Project on a replacement cost basis?

§ C.4.3 Does your commercial general liability policy contain any exclusions or restrictions of coverage that are prohibited in AIA Document A101-2017, Exhibit A, Insurance A.3.2.2.2? If so, identify.

§ C.5 SURETY

§ C.5.1 If requested, will your organization be able to provide a performance and payment bond for this Project?

§ C.5.2 Surety company name:

§ C.5.3 Surety agent name and contact information:

§ C.5.4 Total bonding capacity:

§ C.5.5 Available bonding capacity as of the date of this qualification statement:

**AIA®****Document A305® – 2020 Exhibit D*****Contractor's Past Project Experience***

	1	2	3	4
PROJECT NAME				
PROJECT LOCATION				
PROJECT TYPE				
OWNER				
ARCHITECT				
CONTRACTOR'S PROJECT EXECUTIVE				
KEY PERSONNEL (include titles)				
PROJECT DETAILS	Contract Amount Completion Date % Self-Performed Work	Contract Amount Completion Date % Self-Performed Work	Contract Amount Completion Date % Self-Performed Work	Contract Amount Completion Date % Self-Performed Work
PROJECT DELIVERY METHOD	<input type="checkbox"/> Design-bid-build <input type="checkbox"/> Design-build <input type="checkbox"/> CM constructor <input type="checkbox"/> CM advisor <input type="checkbox"/> Other:	<input type="checkbox"/> Design-bid-build <input type="checkbox"/> Design-build <input type="checkbox"/> CM constructor <input type="checkbox"/> CM advisor <input type="checkbox"/> Other:	<input type="checkbox"/> Design-bid-build <input type="checkbox"/> Design-build <input type="checkbox"/> CM constructor <input type="checkbox"/> CM advisor <input type="checkbox"/> Other:	<input type="checkbox"/> Design-bid-build <input type="checkbox"/> Design-build <input type="checkbox"/> CM constructor <input type="checkbox"/> CM advisor <input type="checkbox"/> Other:
SUSTAINABILITY CERTIFICATIONS				



AIA Document A305® – 2020 Exhibit E

Contractor's Past Project Experience, Continued

	1	2	3	4
PROJECT NAME				
PROJECT LOCATION				
PROJECT TYPE				
OWNER				
ARCHITECT				
CONTRACTOR'S PROJECT EXECUTIVE				
KEY PERSONNEL (include titles)				
PROJECT DETAILS	Contract Amount Completion Date % Self-Performed Work	Contract Amount Completion Date % Self-Performed Work	Contract Amount Completion Date % Self-Performed Work	Contract Amount Completion Date % Self-Performed Work
PROJECT DELIVERY METHOD	<input type="checkbox"/> Design-bid-build <input type="checkbox"/> Design-build <input type="checkbox"/> CM constructor <input type="checkbox"/> CM advisor <input type="checkbox"/> Other:	<input type="checkbox"/> Design-bid-build <input type="checkbox"/> Design-build <input type="checkbox"/> CM constructor <input type="checkbox"/> CM advisor <input type="checkbox"/> Other:	<input type="checkbox"/> Design-bid-build <input type="checkbox"/> Design-build <input type="checkbox"/> CM constructor <input type="checkbox"/> CM advisor <input type="checkbox"/> Other:	<input type="checkbox"/> Design-bid-build <input type="checkbox"/> Design-build <input type="checkbox"/> CM constructor <input type="checkbox"/> CM advisor <input type="checkbox"/> Other:
SUSTAINABILITY CERTIFICATIONS				

SECTION 000429 - NON-COLLUSION AFFIDAVIT OF CONTRACTOR

State of _____

County of _____ being first duly sworn, states that:

(1) They are _____ the (owner, partner, office, representative agent)

Of _____ (Company),

the Bidder that has submitted that attached Bid;

(2) They are fully informed respecting the preparation and contents of the attached Bid and of all pertinent circumstances respecting such Bid;

(3) Such Bid is genuine and is not a collusive or sham Bid;

(4) Neither said Bidder nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affidavit, has, in any way, colluded, conspired, connived, or agreed, directly or indirectly with any other bidder, firm or person to submit a collusive or sham Bid in connection with the Contract for which the attached Bid has been submitted or to refrain from bidding in connection with such Contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other bidder, firm or person, to fix the price or prices in the attached Bid or of any other bidder, or to fix any overhead, profit, or cost element of the Bid price or the Bid price of any other bidder, or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against the School District of Haverford Township or any person interested in the proposed Contract; and,

(5) The price or prices quoted in the attached Bid are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the Bidder or any of its agents, representatives, owners, employees, or parties in interest, including this affidavit.

_____/s/

_____ Title

Subscribed and sworn to before me this _____ day of _____, 20_____.

By: _____
Notary Public

My Commission Expires:



AIA® Document A101® – 2017

Standard Form of Agreement Between Owner and Contractor where the basis of payment is a Stipulated Sum

AGREEMENT made as of the _____ day of _____ in the year _____
(In words, indicate day, month and year.)

BETWEEN the Owner:
(Name, legal status, address and other information)

School District of Haverford Township
50 East Eagle Road
Havertown, PA 19083

and the Contractor: CONTRACT: 3758
(Name, legal status, address and other information)

for the following Project:
(Name, location and detailed description)

Coopertown Elementary School Renovations & Additions
400 Allston Road
Havertown, PA 19083

The Architect:
(Name, legal status, address and other information)

Crabtree, Rohrbaugh & Associates - Architects
401 East Winding Hill Road
Mechanicsburg, PA 17055

The Owner Representative:
(Name, legal status, address, and other information)

C.B. Development Services, Inc.
1617 JFK Boulevard, Suite 1090
Philadelphia, PA 19103

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. A vertical line in the left margin of this document indicates where the author has added necessary information and where the author has added to or deleted from the original AIA text.

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

The parties should complete A101®–2017, Exhibit A, Insurance and Bonds, contemporaneously with this Agreement. AIA Document A201®–2017, General Conditions of the Contract for Construction, is adopted in this document by reference. Do not use with other general conditions unless this document is modified.

The Owner and Contractor agree as follows.

Init.

AIA Document A101 – 2017. Copyright © 1915, 1918, 1925, 1937, 1951, 1958, 1961, 1963, 1967, 1974, 1977, 1987, 1991, 1997, 2007 and 2017. All rights reserved. "The American Institute of Architects," "American Institute of Architects," "AIA," the AIA Logo, and "AIA Contract Documents" are trademarks of The American Institute of Architects. This document was produced at 14:48:05 ET on 12/11/2024 under Order No.2114422437 which expires on 02/28/2025, is not for resale, is licensed for one-time use only, and may only be used in accordance with the AIA Contract Documents® Terms of Service. To report copyright violations, e-mail docinfo@aiaccontracts.com.

User Notes:

(1819243628)

TABLE OF ARTICLES

1	THE CONTRACT DOCUMENTS
2	THE WORK OF THIS CONTRACT
3	DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION
4	CONTRACT SUM
5	PAYMENTS
6	DISPUTE RESOLUTION
7	TERMINATION OR SUSPENSION
8	MISCELLANEOUS PROVISIONS
9	ENUMERATION OF CONTRACT DOCUMENTS

ARTICLE 1 THE CONTRACT DOCUMENTS

The Contract Documents consist of the documents identified in the General Conditions as the Contract Documents, plus Addenda issued prior to execution of this Agreement, other documents listed in this Agreement, and Modifications issued after execution of this Agreement, all of which form the Contract, and are as fully a part of the Contract as if attached to this Agreement or repeated herein. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations or agreements, either written or oral. An enumeration of the Contract Documents, or other than a Modification, appears in Article 9.

ARTICLE 2 THE WORK OF THIS CONTRACT

The Contractor shall fully execute the Work described in the Contract Documents, except as specifically indicated in the Contract Documents to be the responsibility of others.

ARTICLE 3 DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION

§ 3.1 The date of commencement of the Work shall be:

(Check one of the following boxes.)

☐ The date of this Agreement.

☒ A date set forth in a notice to proceed issued by the Owner.

☐ Established as follows:

(Insert a date or a means to determine the date of commencement of the Work.)

If a date of commencement of the Work is not selected, then the date of commencement shall be the date of this Agreement.

§ 3.2 The Contract Time shall be measured from the date of commencement of the Work.

§ 3.3 Substantial Completion

§ 3.3.1 Subject to adjustments of the Contract Time as provided in the Contract Documents, the Contractor shall achieve Substantial Completion of the entire Work as stipulated in Article 9 of Specification Section 000101 and further defined on the Bid Form for this Contract:

(Check one of the following boxes and complete the necessary information.)

AIA Document A101 – 2017. Copyright © 1915, 1918, 1925, 1937, 1951, 1958, 1961, 1963, 1967, 1974, 1977, 1987, 1991, 1997, 2007 and 2017. All rights reserved. "The American Institute of Architects," "American Institute of Architects," "AIA," the AIA Logo, and "AIA Contract Documents" are trademarks of The American Institute of Architects. This document was produced at 14:48:05 ET on 12/11/2024 under Order No.2114422437 which expires on 02/28/2025, is not for resale, is licensed for one-time use only, and may only be used in accordance with the AIA Contract Documents® Terms of Service. To report copyright violations, e-mail docinfo@aiacontracts.com.

User Notes:

(1819243628)

[] Not later than () calendar days from the date of commencement of the Work.

[X] By the following date:

§ 3.3.2 Subject to adjustments of the Contract Time as provided in the Contract Documents, if portions of the Work are to be completed prior to Substantial Completion of the entire Work, the Contractor shall achieve Substantial Completion of such portions by the following dates:

Portion of Work

As listed on Phasing Drawings and in Specification Section 011000 Summary of Work.

§ 3.3.3 If the Contractor fails to achieve Substantial Completion as provided in this Section 3.3, liquidated damages, if any, shall be assessed as set forth in Section 4.5.

ARTICLE 4 CONTRACT SUM

§ 4.1 The Owner shall pay the Contractor the Contract Sum in current funds for the Contractor's performance of the Contract. The Contract Sum shall be (\$), subject to additions and deductions as provided in the Contract Documents.

§ 4.2 Alternates

§ 4.2.1 Alternates, if any, included in the Contract Sum:

Item	Price
------	-------

§ 4.2.2 Subject to the conditions noted below, the following alternates may be accepted by the Owner following execution of this Agreement. Upon acceptance, the Owner shall issue a Modification to this Agreement.
(Insert below each alternate and the conditions that must be met for the Owner to accept the alternate.)

Item	Price	Conditions for Acceptance
------	-------	---------------------------

§ 4.3 Allowances, if any, included in the Contract Sum:
(Identify each allowance.)

Item
No cash allowances.
Refer to specification section 012200 Unit Prices for applicable quantity allowances to be included in the Base Bid.

7 4. 4 Unit prices, if any:

(Identify the item and state the unit price and quantity limitations, if any, to which the unit price will be applicable.)

Item	Units and Limitations	Price per Unit (\$0.00)
------	-----------------------	-------------------------

§ 4.5

(Paragraphs deleted)
Intentionally Deleted.

§ 4.6 Intentionally Deleted.

ARTICLE 5 PAYMENTS

§ 5.1 Progress Payments

§ 5.1.1 Based upon Applications for Payment submitted to the Architect by the Contractor and Certificates for Payment issued by the Architect, **and approved by the Owner and Owner's Representative**, the Owner shall make progress payments on account of the Contract Sum to the Contractor as provided below and elsewhere in the Contract Documents.

§ 5.1.2 The period covered by each Application for Payment shall be one calendar month ending on the last day of the month, or as follows:

§ 5.1.3 **Provided that an Application for Payment is received by the Architect not later than the 25th day of a month, the Owner shall make payment of the amount certified to the Contractor not later than the 10 business days after the second regularly scheduled School Board meeting of the following month.**

(Federal, state or local laws may require payment within a certain period of time.)

§ 5.1.4 Each Application for Payment shall be based on the most recent schedule of values submitted by the Contractor in accordance with the Contract Documents. The schedule of values shall allocate the entire Contract Sum among the various portions of the Work. The schedule of values shall be prepared in such form, and supported by such data to substantiate its accuracy, as the Architect may require. This schedule of values shall be used as a basis for reviewing the Contractor's Applications for Payment.

§ 5.1.5 Applications for Payment shall show the percentage of completion of each portion of the Work as of the end of the period covered by the Application for Payment.

§ 5.1.6 In accordance with AIA Document A201™–2017, General Conditions of the Contract for Construction, and subject to other provisions of the Contract Documents, the amount of each progress payment shall be computed as follows:

§ 5.1.6.1 The amount of each progress payment shall first include:

- .1 That portion of the Contract Sum properly allocable to completed Work;
- .2 That portion of the Contract Sum properly allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the completed construction, or, if approved in advance by the Owner, suitably stored off the site at a location agreed upon in writing; and
- .3 **That portion of Construction Change Directives that the Owner's Representative, with input from the Architect, determines reasonably justified.**

§ 5.1.6.2 The amount of each progress payment shall then be reduced by:

- .1 The aggregate of any amounts previously paid by the Owner;
- .2 The amount, if any, for Work that remains uncorrected and for which the Architect has previously withheld a Certificate for Payment as provided in Article 9 of AIA Document A201–2017;
- .3 Any amount for which the Contractor does not intend to pay a Subcontractor or material supplier, unless the Work has been performed by others the Contractor intends to pay;
- .4 For Work performed or defects discovered since the last payment application, any amount for which the Architect may withhold payment, or nullify a Certificate of Payment in whole or in part, as provided in Article 9 of AIA Document A201–2017; and
- .5 Retainage withheld pursuant to Section 5.1.7.

§ 5.1.7 Retainage

§ 5.1.7.1 For each progress payment made prior to Substantial Completion of the Work, the Owner may withhold the following amount, as retainage, from the payment otherwise due **in accordance with the General Conditions**:

(Insert a percentage or amount to be withheld as retainage from each Application for Payment. The amount of retainage may be limited by governing law.)

§ 5.1.7.1.1 The following items are not subject to retainage:
(Insert any items not subject to the withholding of retainage, such as general conditions, insurance, etc.)

Not applicable.

§ 5.1.7.2 Reduction or limitation of retainage, if any, shall be as
(Paragraphs deleted)
set forth in the General Conditions.

§ 5.1.7.3 Except as set forth in this Section 5.1.7.3, upon Substantial Completion of the Work, the Contractor may submit an Application for Payment that includes the retainage withheld from prior Applications for Payment pursuant to this Section 5.1.7. The Application for Payment submitted at Substantial Completion
(Paragraphs deleted)
be processed in accordance with the General Conditions.

§ 5.1.8 Intentionally deleted.

§ 5.1.9 Intentionally deleted.

§ 5.2 Final Payment

§ 5.2.1 Final payment, constituting the entire unpaid balance of the Contract Sum, shall be made by the Owner to the Contractor
(Paragraphs deleted)
in accordance with the General Conditions.

§ 5.2.2 The Owner's final payment to the Contractor shall be **in accordance with the General Conditions.**

§ 5.3 Interest

Payments due and unpaid under the Contract shall bear interest from the date payment is due at the rate stated below, or in the absence thereof, at the legal rate prevailing from time to time at the place where the Project is located.

3 % per year

ARTICLE 6 DISPUTE RESOLUTION

§ 6.1 Initial Decision Maker

The **Owner Representative** will serve as the Initial Decision Maker pursuant to Article 15 of AIA Document A201–2017, unless the parties appoint below another individual, not a party to this Agreement, to serve as the Initial Decision Maker.
(Paragraphs deleted)

§ 6.2 Binding Dispute Resolution

For any Claim subject to, but not resolved by, mediation pursuant to Article 15 of AIA Document A201–2017, the method of binding dispute resolution shall be
(Paragraphs deleted)
set forth in the General Conditions.

ARTICLE 7 TERMINATION OR SUSPENSION

§ 7.1 The Contract may be terminated by the Owner or the Contractor as provided in **the General Conditions.**

§ 7.1.1 If the Contractor is terminated for the Owner's convenience in accordance with the General Conditions, then the Owner shall pay the Contractor
(Paragraphs deleted)
in accordance with the General Conditions.

§ 7.2 The Work may be suspended by the Owner as provided in **the General Conditions.**

ARTICLE 8 MISCELLANEOUS PROVISIONS

§ 8.1 Where reference is made in this Agreement to a provision of AIA Document A201–2017 or another Contract Document, the reference refers to that provision as amended or supplemented by other provisions of the Contract Documents.

§ 8.2 The Owner's representative:
(Name, address, email address, and other information)

C.B. Development Services, Inc.
1617 JFK Boulevard, Suite 1090
Philadelphia, PA 19103

OWNER:
School District of Haverford Township
50 East Eagle Road
Havertown, PA 19083

§ 8.3 The Contractor's representative:
(Name, address, email address, and other information)

§ 8.4 Neither the Owner's nor the Contractor's representative shall be changed without ten days' prior notice to the other party.

§ 8.5 Insurance and Bonds
AIA Document A101™ -2017, Exhibit A, Insurance and Bonds, referenced on Page 1 of this Agreement is not being incorporated as part of this Agreement.

§ 8.5.1 The Owner and the Contractor shall purchase and maintain insurance as set forth in Instructions to Bidders and the General Conditions.

§ 8.5.1.1 The Contractor's Commercial General Liability policy shall not contain an exclusion or restriction of coverage for the following:

- .1 Claims by one insured against another insured, if the exclusion or restriction is based solely on the fact that the claimant is an insured, and there would otherwise be coverage for the claim.
- .2 Claims for property damage to the Contractor's Work arising out of the products-completed operations hazard where the damaged Work or the Work out of which the damage arises was performed by a Subcontractor.
- .3 Claims for bodily injury other than to employees of the insured.
- .4 Claims for indemnity under Section 3.18 of the General Conditions arising out of injury to employees of the insured.
- .5 Claims or loss excluded under a prior work endorsement or other similar exclusionary language.
- .6 Claims or loss due to physical damage under a prior injury endorsement or similar exclusionary language.
- .7 Claims related to roofing, if the Work involves roofing.
- .8 Claims related to exterior insulation finish systems (EIFS), synthetic stucco or similar exterior coatings or surfaces, if the Work involves such coatings or surfaces.
- .9 Claims related to earth subsidence or movement, where the Work involves such hazards.
- .10 Claims related to explosion, collapse and underground hazards, where the Work involves such hazards.

Init.

§ 8.5.2 The Contractor shall provide bonds as set forth in the **Contract Documents**.

§ 8.6 Notice in electronic format, pursuant to Article 1 of AIA Document A201–2017, may be given in accordance with AIA Document E203™–2013, Building Information Modeling and Digital Data Exhibit, if completed, or as otherwise set forth below:
(Paragraphs deleted)

§ 8.7 Other provisions:

N/A

ARTICLE 9 ENUMERATION OF CONTRACT DOCUMENTS

§ 9.1 This Agreement is comprised of the following documents:

- .1 AIA Document A101™–2017, Standard Form of Agreement Between Owner and Contractor as modified
- .2 Intentionally deleted
- .3 AIA Document A201™–2017, General Conditions of the Contract for Construction
- .4

(Paragraphs deleted)

Intentionally deleted

- .5 Drawings

Number

Title

Date

See Exhibit A – List of Drawings

- .6 Specifications

Section

Title

Date

Pages

See Exhibit B – Table of Contents

- .7 Addenda, if any:

Number

Date

Pages

Portions of Addenda relating to bidding or proposal requirements are not part of the Contract Documents unless the bidding or proposal requirements are also enumerated in this Article 9.

- .8 Other Exhibits:

(Check all boxes that apply and include appropriate information identifying the exhibit where required.)

[

(Paragraphs deleted)

X]

Supplementary and other Conditions of the Contract:

Document

Title

Date

Pages

See Exhibit B – Table of Contents

(Paragraphs deleted)

- .9 Other documents, if any, listed below:

(List here any additional documents that are intended to form part of the Contract Documents. AIA Document A201™–2017 provides that the advertisement or invitation to bid, Instructions to Bidders,

Init.

sample forms, the Contractor's bid or proposal, portions of Addenda relating to bidding or proposal requirements, and other information furnished by the Owner in anticipation of receiving bids or proposals, are not part of the Contract Documents unless enumerated in this Agreement. Any such documents should be listed here only if intended to be part of the Contract Documents.)

Exhibits A List of Drawings and Exhibit B Table of Contents

This Agreement entered into as of the day and year first written above.

School District of Haverford Township

OWNER *(Signature)*

(Printed name and title)

CONTRACTOR *(Signature)*

(Printed name and title)

Init.

AIA Document A101 – 2017. Copyright © 1915, 1918, 1925, 1937, 1951, 1958, 1961, 1963, 1967, 1974, 1977, 1987, 1991, 1997, 2007 and 2017. All rights reserved. "The American Institute of Architects," "American Institute of Architects," "AIA," the AIA Logo, and "AIA Contract Documents" are trademarks of The American Institute of Architects. This document was produced at 14:48:05 ET on 12/11/2024 under Order No.2114422437 which expires on 02/28/2025, is not for resale, is licensed for one-time use only, and may only be used in accordance with the AIA Contract Documents® Terms of Service. To report copyright violations, e-mail docinfo@aiacontracts.com.

User Notes:

(1819243628)

EXHIBIT A — INSURANCE AND BONDS

...

The Contract Documents consist of this Agreement, Conditions of the Contract (General, Supplementary, and other Conditions), Drawings, Specifications, the documents identified in the General Conditions as the Contract Documents, plus Addenda issued prior to execution of this Agreement, other documents listed in this Agreement, and Modifications issued after execution of this Agreement, all of which form the Contract, and are as fully a part of the Contract as if attached to this Agreement or repeated herein. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations, representations or agreements, either written or oral. An enumeration of the Contract Documents, or other than a Modification, appears in Article 9.

...

Additions and Deletions Report for AIA Document A101 – 2017. Copyright © 1915, 1918, 1925, 1937, 1951, 1958, 1961, 1963, 1967, 1974, 1977, 1987, 1991, 1997, 2007 and 2017. All rights reserved. "The American Institute of Architects," "American Institute of Architects," "AIA," the AIA Logo, and "AIA Contract Documents" are trademarks of The American Institute of Architects. This document was produced at 14:48:05 ET on 12/11/2024 under Order No.2114422437 which expires on 02/28/2025, is not for resale, is licensed for one-time use only, and may only be used in accordance with the AIA Contract Documents® Terms of Service. To report copyright violations, e-mail docinfo@aiacontracts.com.

User Notes:

(1819243628)

Additions and Deletions Report for

AIA® Document A101® – 2017

This Additions and Deletions Report, as defined on page 1 of the associated document, reproduces below all text the author has added to the standard form AIA document in order to complete it, as well as any text the author may have added to or deleted from the original AIA text. Added text is shown underlined. Deleted text is indicated with a horizontal line through the original AIA text.

Note: This Additions and Deletions Report is provided for information purposes only and is not incorporated into or constitute any part of the associated AIA document. This Additions and Deletions Report and its associated document were generated simultaneously by AIA software at 14:48:05 ET on 12/11/2024.

PAGE 1

School District of Haverford Township
50 East Eagle Road
Havertown, PA 19083

and the Contractor:

CONTRACT: 3758

...

Coopertown Elementary School Renovations & Additions
400 Allston Road
Havertown, PA 19083

...

Crabtree, Rohrbaugh & Associates - Architects
401 East Winding Hill Road
Mechanicsburg, PA 17055

The Owner Representative:
(Name, legal status, address, and other information)

C.B. Development Services, Inc.
1617 JFK Boulevard, Suite 1090
Philadelphia, PA 19103

[X] A date set forth in a notice to proceed issued by the Owner.

...

§ 3.3.1 Subject to adjustments of the Contract Time as provided in the Contract Documents, the Contractor shall achieve Substantial Completion of the entire ~~Work~~ Work as stipulated in Article 9 of Specification Section 000101 and further defined on the Bid Form for this Contract.

PAGE 3

[X] By the following date:

...

Portion of Work

Substantial Completion Date

Portion of Work

As listed on Phasing Drawings and in Specification Section 011000 Summary of Work.

...

Item

Price

Item

No cash allowances.

Refer to specification section 012200 Unit Prices for applicable quantity allowances to be included in the Base Bid.

...

§ 4.5 Liquidated damages, if any:

(Insert terms and conditions for liquidated damages, if any.)

Intentionally Deleted.

§ 4.6 Other:

(Insert provisions for bonus or other incentives, if any, that might result in a change to the Contract Sum.) Intentionally Deleted.

PAGE 4

§ 5.1.1 Based upon Applications for Payment submitted to the Architect by the Contractor and Certificates for Payment issued by the Architect, and approved by the Owner and Owner's Representative, the Owner shall make progress payments on account of the Contract Sum to the Contractor as provided below and elsewhere in the Contract Documents.

...

§ 5.1.3 Provided that an Application for Payment is received by the Architect not later than the 25th day of a month, the Owner shall make payment of the amount certified to the Contractor not later than the day of the month. If an Application for Payment is received by the Architect after the application date fixed above, payment of the amount certified shall be made by the Owner not later than () days after the Architect receives the Application for Payment. 10 business days after the second regularly scheduled School Board meeting of the following month.

...

- 3 That portion of Construction Change Directives that the Architect determines, in the Architect's professional judgment, to be Owner's Representative, with input from the Architect, determines reasonably justified.

...

§ 5.1.7.1 For each progress payment made prior to Substantial Completion of the Work, the Owner may withhold the following amount, as retainage, from the payment otherwise due: due in accordance with the General Conditions;
PAGE 5

Not applicable.

§ 5.1.7.2 Reduction or limitation of retainage, if any, shall be as follows:
(If the retainage established in Section 5.1.7.1 is to be modified prior to Substantial Completion of the entire Work, including modifications for Substantial Completion of portions of the Work as provided in Section 3.3.2, insert provisions for such modifications.)

set forth in the General Conditions.

§ 5.1.7.3 Except as set forth in this Section 5.1.7.3, upon Substantial Completion of the Work, the Contractor may submit an Application for Payment that includes the retainage withheld from prior Applications for Payment pursuant to this Section 5.1.7. The Application for Payment submitted at Substantial Completion shall not include retainage as follows:
(Insert any other conditions for release of retainage upon Substantial Completion.)

be processed in accordance with the General Conditions.

§ 5.1.8 If final completion of the Work is materially delayed through no fault of the Contractor, the Owner shall pay the Contractor any additional amounts in accordance with Article 9 of AIA Document A201-2017. Intentionally deleted.

...

§ 5.1.9 Except with the Owner's prior approval, the Contractor shall not make advance payments to suppliers for materials or equipment which have not been delivered and stored at the site. Intentionally deleted.

...

§ 5.2.1 Final payment, constituting the entire unpaid balance of the Contract Sum, shall be made by the Owner to the Contractor when

- 1 the Contractor has fully performed the Contract except for the Contractor's responsibility to correct Work as provided in Article 12 of AIA Document A201-2017, and to satisfy other requirements, if any, which extend beyond final payment; and
- 2 a final Certificate for Payment has been issued by the Architect. in accordance with the General Conditions.

§ 5.2.2 The Owner's final payment to the Contractor shall be made no later than 30 days after the issuance of the Architect's final Certificate for Payment, or as follows:

in accordance with the General Conditions.

...

(Insert rate of interest agreed upon, if any.)

~~—%—3 % per year~~

...

The ~~Architect~~ **Owner Representative** will serve as the Initial Decision Maker pursuant to Article 15 of AIA Document A201–2017, unless the parties appoint below another individual, not a party to this Agreement, to serve as the Initial Decision Maker.
(If the parties mutually agree, insert the name, address and other contact information of the Initial Decision Maker, if other than the Architect.)

...

For any Claim subject to, but not resolved by, mediation pursuant to Article 15 of AIA Document A201–2017, the method of binding dispute resolution shall be as follows:
(Check the appropriate box.)

- ☐ — Arbitration pursuant to Section 15.4 of AIA Document A201–2017
- ☐ — Litigation in a court of competent jurisdiction
- ☐ — Other *(Specify)*

If the Owner and Contractor do not select a method of binding dispute resolution, or do not subsequently agree in writing to a binding dispute resolution method other than litigation, Claims will be resolved by litigation in a court of competent jurisdiction set forth in the General Conditions.

...

§ 7.1 The Contract may be terminated by the Owner or the Contractor as provided in Article 14 of AIA Document A201–2017. the General Conditions.

§ 7.1.1 If the ~~Contract~~ **Contractor** is terminated for the Owner's convenience in accordance with Article 14 of AIA Document A201–2017, the General Conditions, then the Owner shall pay the Contractor a termination fee as follows:
(Insert the amount of, or method for determining, the fee, if any, payable to the Contractor following a termination for the Owner's convenience.)

in accordance with the General Conditions.

§ 7.2 The Work may be suspended by the Owner as provided in Article 14 of AIA Document A201–2017. the General Conditions.

PAGE 6

C.B. Development Services, Inc.
1617 JFK Boulevard, Suite 1090
Philadelphia, PA 19103

...

OWNER:
School District of Haverford Township

50 East Eagle Road
Havertown, PA 19083

...

AIA Document A101™-2017, Exhibit A, Insurance and Bonds, referenced on Page 1 of this Agreement is not being incorporated as part of this Agreement.

§ 8.5.1 The Owner and the Contractor shall purchase and maintain insurance as set forth in AIA Document A101™-2017, Standard Form of Agreement Between Owner and Contractor where the basis of payment is a Stipulated Sum, Exhibit A, Insurance and Bonds, and elsewhere in the Contract Documents. Instructions to Bidders and the General Conditions.

§ 8.5.1.1 The Contractor's Commercial General Liability policy shall not contain an exclusion or restriction of coverage for the following:

- .1 Claims by one insured against another insured, if the exclusion or restriction is based solely on the fact that the claimant is an insured, and there would otherwise be coverage for the claim.
- .2 Claims for property damage to the Contractor's Work arising out of the products-completed operations hazard where the damaged Work or the Work out of which the damage arises was performed by a Subcontractor.
- .3 Claims for bodily injury other than to employees of the insured.
- .4 Claims for indemnity under Section 3.18 of the General Conditions arising out of injury to employees of the insured.
- .5 Claims or loss excluded under a prior work endorsement or other similar exclusionary language.
- .6 Claims or loss due to physical damage under a prior injury endorsement or similar exclusionary language.
- .7 Claims related to roofing, if the Work involves roofing.
- .8 Claims related to exterior insulation finish systems (EIFS), synthetic stucco or similar exterior coatings or surfaces, if the Work involves such coatings or surfaces.
- .9 Claims related to earth subsidence or movement, where the Work involves such hazards.
- .10 Claims related to explosion, collapse and underground hazards, where the Work involves such hazards.

§ 8.5.2 The Contractor shall provide bonds as set forth in AIA Document A101™-2017 Exhibit A, and elsewhere in the Contract Documents.

§ 8.6 Notice in electronic format, pursuant to Article 1 of AIA Document A201-2017, may be given in accordance with a building information modeling exhibit, AIA Document E203™-2013, Building Information Modeling and Digital Data Exhibit, if completed, or as otherwise set forth below:

(If other than in accordance with a building information modeling exhibit, insert requirements for delivering notice in electronic format such as name, title, and email address of the recipient and whether and how the system will be required to generate a read receipt for the transmission.)

PAGE 7

N/A

...

- .1 AIA Document A101™-2017, Standard Form of Agreement Between Owner and Contractor as modified
- .2 AIA Document A101™-2017, Exhibit A, Insurance and Bonds Intentionally deleted

...

- .4 Building information modeling exhibit, dated as indicated below:

(Insert the date of the building information modeling exhibit incorporated into this Agreement.)

Intentionally deleted

...

See Exhibit A – List of Drawings

...

See Exhibit B – Table of Contents

...

...

[] ~~AIA Document E204™ 2017, Sustainable Projects Exhibit, dated as indicated below:~~
~~(Insert the date of the E204 2017 incorporated into this Agreement.)~~

[] ~~The Sustainability Plan:~~ **X** Supplementary and other Conditions of the Contract:

<u>Title</u>	<u>Date</u>	<u>Pages</u>
--------------	-------------	--------------

<u>Document</u>	<u>Title</u>	<u>Date</u>	<u>Pages</u>
<u>See Exhibit B – Table of Contents</u>			

[] ~~Supplementary and other Conditions of the Contract:~~

<u>Document</u>	<u>Title</u>	<u>Date</u>	<u>Pages</u>
-----------------	--------------	-------------	--------------

PAGE 8

Exhibits A List of Drawings and Exhibit B Table of Contents

...

School District of Haverford Township

Certification of Document's Authenticity

AIA® Document D401™ – 2003

I, _____, hereby certify, to the best of my knowledge, information and belief, that I created the attached final document simultaneously with its associated Additions and Deletions Report and this certification at 14:48:05 ET on 12/11/2024 under Order No. 2114422437 from AIA Contract Documents software and that in preparing the attached final document I made no changes to the original text of AIA® Document A101™ – 2017, Standard Form of Agreement Between Owner and Contractor where the basis of payment is a Stipulated Sum, other than those additions and deletions shown in the associated Additions and Deletions Report.

(Signed)

(Title)

(Dated)

SECTION 000520 - AFFIDAVIT ACCEPTING PROVISIONS OF THE WORKMEN'S COMPENSATION ACTS

State of _____

County of _____

_____, being duly sworn according to law, deposes and says that he/she is authorized to execute this affidavit on behalf of the below designated Contractor, that said Contractor is familiar with and has accepted the provisions of the Workmen's Compensation Act of 1915 or the Commonwealth of Pennsylvania with its supplements and amendments, including the amendments set forth in Act 44 of 1993, and that said Contractor has insured its liability thereunder, in accordance with the terms of said Act, with the following insurance company

_____, Policy # _____
(insurance company)

The undersigned further acknowledges that said Contractor is aware of its obligation not to subcontract all or any part of the Work, if awarded, unless each subcontractor has presented proof of Workmen's Compensation Insurance, and that Contractor and all subcontractors must provide proof of Workmen's Compensation Insurance to Owner, which insurance shall be effective for the duration of the Work. In the event that Owner shall receive notice that any such insurance has been canceled or terminated, Owner shall issue a Stop Work Order as required by law.

(Name of Contractor)

By: _____
Signature

Sworn and subscribed to before me this _____ day of _____, 20_____.

Notary Public

My Commissioner Expires: _____

END OF SECTION 000520

BID BOND

KNOW ALL MEN BY THESE PRESENTS that we, _____ (hereinafter called the "Principal"), and _____, a corporation authorized to transact business in Pennsylvania, and having its principal office at _____ (hereinafter called the "Surety"), as Surety, are held and firmly bound unto Haverford Township School District (hereinafter called the "Obligee"), as Obligee, in the sum of _____ Dollars (\$_____) lawful money of the United States of America, for payment of which we bind ourselves, and each of our respective heirs, legal representatives, successors and assigns, jointly and severally, by these presents on this _____ day of _____, 2024.

WHEREAS, said Principal is herewith submitting to the Obligee a bid to perform work for the Obligee's proposed _____ Project, pursuant to plans, specifications, and other Contract Documents incorporated into said bid by reference; and it is a condition of the Obligee's receipt and consideration of said bid that such shall be accompanied by bid security to be held by the Obligee on terms embodied herein.

THEREFORE, the condition of this obligation is that in the event of acceptance of his bid by Obligee and within the period specified therefore in the bidding requirements, said Principal shall, within the time set forth in the Bidding Documents, provide to the Obligee (i) the required bonds in the required amounts and on the required forms, (ii) certificates of insurance evidencing the coverages and minimum limits required by the Contract documents, (iii) a properly executed Public Works Employment Verification form, and (iv) a signed copy of the contract for construction, then this obligation shall be void and of no effect, but otherwise it shall remain in full force. In the event of the failure to enter into such contract, give such bonds, and furnish such certificates within the time specified, the Principal and Surety will pay to the Obligee the amount of this Bid Security together with interest as liquidated damages.

IN WITNESS WHEREOF, the Principal and Surety, intending to be legally bound, have executed this Bond the day and year aforementioned.

(Individual Principal)

(SEAL)

Witness:

Signature of Individual
Trading and doing business as:

(Individual Name)

(Business Name)

(Partnership Principal)

(Name of Partnership)

Witness:

(SEAL)

By: _____
Partner

(SEAL)

By: _____
Partner

(SEAL)

By: _____
Partner

(Corporation Principal)

(Name of Corporation)

Attest: _____
Secretary/Assistant Secretary

By: _____
President/Vice President

(CORPORATE SEAL)
OR (if applicable)

Attest: _____

*By: _____
Authorized Representative

*Attach appropriate proof, dated as of the same date as the bond, evidencing authority to execute on behalf of the corporation.

(CORPORATE SURETY)

Name of Corporation

Witness or Attest:

By: _____

Title

(CORPORATE SEAL)

**Attach an appropriate Power of Attorney, dated as of the same date as the bond, evidencing the authority of the Attorney-in-Fact to act on behalf of the Corporation.

PERFORMANCE BOND

And Now, we _____ as Principal (the "Principal"), and _____, a Corporation organized and existing under the laws of the _____ of _____ as Surety (the "Surety"), are jointly and severally held and firmly bound to the Haverford Township School District, its successors and assigns (the "Obligee"), for the performance of the Contract hereinafter identified and incorporated herein by this reference in the sum of _____, lawful money of the United States of America to be paid to the Obligee; to which performance or payment, well and truly to be made, we bind ourselves and each of our successors and assigns, jointly and severally.

I. RECITALS

WHEREAS, the Principal has submitted to the Obligee a certain proposal, dated _____ (the "Proposal"), to perform certain _____ (Name of Contract) for the _____ (Name of Project) for the Obligee, in connection with plans, specifications and other related documents, which are incorporated into the Proposal by reference (the "Contract Documents"); and

WHEREAS, the Obligee, is a "contracting body" under provisions of Act No. 385 of the General Assembly of the Commonwealth of Pennsylvania, approved by the Governor on December 20, 1967, known as and cited as the "Public Works Contractors' Bond Law of 1967" (the "Act");

WHEREAS, the Act, in Section 3 (a), requires that, before an award shall be made to the Principal by the Obligee in accordance with the Proposal, the Principal shall furnish this Bond to the Obligee, with this Bond to become binding upon the award of a contract to the Principal by the Obligee in accordance with the Proposal; and

WHEREAS, it also is a condition of the Contract Documents that this Bond shall be furnished by the Principal to the Obligee and

WHEREAS, under the Contract Documents, it is provided, inter alia, that if the Principal shall furnish this Bond to the Obligee, and if the Obligee shall make an award to the Principal in accordance with the Proposal, then the Principal and the Obligee shall enter into an agreement with respect to performance of such work (the "Agreement"), the form of which Agreement is set forth in the Contract Documents.

II. CONDITIONS OF BOND

NOW, THEREFORE, the terms and conditions of this Bond are and shall be that if:

(a) the Principal well, truly, and faithfully shall comply with and shall perform the Agreement in accordance with the Contract Documents, at the time and in the manner provided in the Agreement and in the Contract Documents, and if the Principal shall satisfy all claims and demands incurred in or related to the performance of the Agreement by the Principal or growing out of the performance of the Agreement by the Principal, and if the Principal shall indemnify completely and shall hold harmless the Obligee and all of its officers, directors, agents or employees from any and all costs and damages which the Obligee and any or all of its officers, directors, agents and employees may sustain or suffer including,

but not limited to, attorney's fees, costs, expenses and interest by reason of the failure of the Principal to do so, and if the Principal shall reimburse completely and pay to the Obligee any and all costs, damages and expenses, including interest and attorney's fees) which the Obligee and any or all of its officers, directors, agents and employees may incur by reason of any such default or failure by the principal and

(b) the Principal shall remedy, without cost to the Obligee, all defects, deficiencies or failures in any labor, materials or equipment performed or provided by the Principal in its performance of the Agreement which may develop during the period of one (1) year from the date of substantial completion of the Project by the Principal and final acceptance of the Obligee of the work to be performed under the Agreement in accordance with the Contract Documents, which defects, in the sole judgment of the Obligee or its legal successors in interests, shall be caused by or shall result from defective or inferior materials or workmanship, then this Bond shall be void; otherwise, this Bond shall be and shall remain in force and effect.

We further agree to indemnify and hold harmless the Obligee against any and all costs, liabilities, expenses, attorney's fees and obligations which the Obligee sustains by reason of the failure of the Principal or the Surety to comply with the terms of the Contract Documents or this Obligation. This Bond is executed and delivered under and subject to the Act, to which reference hereby is made.

The Principal and the Surety agree that any alterations, changes or additions to the Contract Documents, or any alterations, changes or additions to the work to be performed under the Agreement in accordance with the Contract Documents, or any alterations, changes or additions to the Agreement, or any act of forbearance of either the Principal or the Obligee toward the other with respect to the Contract Documents and the Agreement, or the reduction of any percentage to be retained by Obligee as permitted by the Contract Documents and by the Agreement, shall not release in any manner whatsoever, the Principal and the Surety or either of them, their heirs, executors, administrators, successors and assigns, from liability and obligations under this Bond; and the Surety, for value received, waives notice of any such alterations, changes, additions, extensions of time, acts of forbearance or reduction of retained percentage.

It is further agreed that, in the sole discretion of the Obligee and upon notice therefrom, the Surety may be required to perform and carry out the provisions of the Contract in the event of a breach thereof by the Principal, whereupon the rights and responsibilities of the Surety and the Obligee to each other shall be the same as those of the Principal and the Obligee immediately prior to the breach giving rise to the Surety's obligation hereunder. If the Surety does not proceed promptly to render such performance or cause such performance to be rendered by a third party satisfactory to the Obligee, then, the Surety shall be deemed to be in default on this obligation fifteen (15) days after the receipt of notice from Obligee that the Surety shall so proceed, and the Obligee shall be entitled to enforce against Surety any remedy it may then or thereafter have against the Principal. If the Principal is a foreign corporation (incorporated under any laws other than those of the Commonwealth of Pennsylvania) then further terms and conditions of this Bond are and shall be that the Principal or the Surety shall not be discharged from liability on this, nor this Bond surrendered until such Principal files with the Obligee a certificate from the Pennsylvania of Revenue evidencing the payment in full of all bonus taxes, penalties and interest, and a certificate from the Bureau of Employment and Unemployment Compensation of the Pennsylvania Department of Labor and industry, evidencing the payment of all unemployment compensation, contributions, penalties and corporations, subcontractors thereunder or for such liability

has accrued but the time for payment has not arrived, all in accordance with provisions of the Act of June 10, 1947, P.L. 493, of the Commonwealth of Pennsylvania.

This obligation incorporates by reference the Public Works Contractors' Bond Law of 1967, provided, however, that in the event of any inconsistencies or ambiguity in the meaning of this obligation and the said Public Works Contractors' Bond Law of 1967 the express terms of this obligation shall govern and control.

IN WITNESS WHEREOF, the Principal and Surety cause this Bond to be signed, sealed and delivered this _____ day of _____, 20__.

ATTEST:

[NAME OF CORPORATION]

By: _____
President

(CORPORATE SEAL)

or, if appropriate

WITNESS

[NAME OF CORPORATION]

By: _____
Authorized Representative

(CORPORATE SEAL)

*Attach appropriate proof, bearing date of Bond,
evidencing authority to act for Corporation

WITNESS

Corporate Surety

By: _____
Attorney-in-Fact

(CORPORATE SEAL)

Issuing Office:

Address

City, State, Zip

IMPORTANT:

Surety companies executing Bonds must appear on the Commonwealth of Pennsylvania Insurance Department's most current licensed company list and be authorized to transact business as a surety in the Commonwealth of Pennsylvania and have an AM Best rating of "A-" or higher.

PAYMENT BOND

KNOW THESE MEN BY THESE PRESENTS that we, _____,
_____, as Principal (the "Principal"), and _____
_____, a corporation organized and existing under laws of _____
_____ of _____, Surety (the "Surety", are held and firmly
bound unto Haverford Township School District as Obligee (the "Obligee"), as hereinafter set forth, in
the full and just sum of _____
_____ Dollars (\$ _____) lawful
money of the United States of America, for the payment of which we bind ourselves, our heirs,
executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WITNESSETH THAT:

WHEREAS, the Principal heretofore has submitted to the Obligee a certain proposal, dated
_____, 20____ (the "Proposal"), to perform certain _____ Work for the Obligee, _____ in
connection with _____ pursuant to plans, specifications and
other related documents, which are incorporated into the Proposal by reference

(the "Contract Document"), as prepared by the Obligee.

WHEREAS, the Obligee, is a "contracting body" under the provisions of Act No. 385 of the General
Assembly of the Commonwealth of Pennsylvania, approved by the Governor on December 20, 1967,
known as and cited as the "Public Works Contractors' Bond Law of 1967" the "Act");

WHEREAS, the Act, in Section 3 (a), requires that, before an award shall be made to the Principal by the
Obligee in accordance with the Proposal, the Principal shall furnish this Bond to the Obligee, with this
Bond to become binding upon the award of a contract to the Principal by the Obligee in accordance with
the Proposal; and

WHEREAS, it also is a condition of the Contract Documents that this Bond shall be furnished by the
Principal to the Obligee and

WHEREAS, under the Contract, it is provided, inter alia, that if the Principal shall furnish this Bond the
Obligee, and if the Obligee shall make an award to the Principal in accordance with the Proposal, then
the Principal and the Obligee shall enter into an agreement with respect to performance of such work
(the "Agreement"), the form of which Agreement is set forth in the Contract Documents.

NOW, THEREFORE, the terms and conditions of the bond are and shall be that if the Principal and any
subcontractor of the Principal to whom any portion of the work under the Agreement shall be
subcontracted, and if all assignees of the Principal and of any such subcontractor, promptly pay or shall
cause to be paid, in full, all money which may be due any claimant supplying labor or materials in the
prosecution and performance of the work in accordance with the Agreement and in accordance with the
Contract Documents, including any amendment, extension or addition to the Agreement and/or to the
Contract Documents, for material furnished or labor supplied or labor performed, then this Bond shall
be void, otherwise, the Bond shall be and shall remain in force and effect.

This Bond, as provided by the Act, shall be solely for the protection of claimants supplying labor or materials to the Principal or to any subcontractor of the Principal in the prosecution of the work covered by the Agreement, including any amendment, extension or addition to the Agreement. The term "Claimant", when used herein and as required by the Act, shall mean any individual, firm, partnership, association or corporation. The phrase "Labor or Materials" when used herein and as required by the Act, shall include public utility services and reasonable rentals of equipment, but only for periods when the equipment rented is actually used at the site of the work covered by the Agreement. As required by the Act, the provisions of this Bond shall be applicable whether or not the material furnished or labor performed enters into and becomes a component part of the public building, public work or public improvement contemplated by the Contract Documents and the Agreement.

As provided and required by the Act, the Principal and the Surety agree that any claimant, who has performed labor or furnished material in the prosecution of the work in accordance with the Agreement and in accordance with the Contract Documents, including any amendment, extension or addition to the Agreement, and/or to the Contract Documents, and who has not been paid therefore, in full, before the expiration of ninety (90) days after the day on which such claimant performed the last of such labor or furnished the last of such materials for which payment is claimed, may institute an action upon this Bond, in the name of the claimant in assumpsit, to recover any amount due the claimant for such labor or material; and may prosecute such action to final judgment and may have execution upon the judgment provided however, that: (a) any claimant who has a direct contractual relationship with any subcontractor of the Principal but has contractual relationship, express or implied, with the Principal, may institute an action upon this Bond only if such claimant first shall have given written notice, served in the manner provided in the Act, to the Principal, within ninety (90) days from the date upon which such claimant performed the last of the labor or furnished the last of the materials for which payment is claimed, stating, with substantial accuracy, the amount claimed and the name of the person for whom the work was performed or to whom the material was furnished; and (b) no action upon this bond shall be commenced after the expiration of one (1) year from the day upon which the last of the labor was performed or material supplied, for the payment of which such action is instituted by the claimant; and (c) every action upon this Bond shall be instituted either in the appropriate court of the County where the Agreement is to be performed or of such other County as Pennsylvania statutes shall provide, or in the United States District Court for the district in which the project, to this Agreement relates, is situated, and not elsewhere.

This Bond is executed and delivered under and subject to the Act, to which reference hereby is made.

The Principal and the Surety agree that any alterations, changes and/or additions to the Contract Document, and/or any alterations, changes and/or additions to the work to be performed under the Agreement in accordance with the Contract Documents, and/or any alterations, changes and/or additions to the Agreement, and/or any giving by the Oblige of any extensions of time for the performance of the Agreement in accordance with the Contract Documents, and/or any act of forbearance of either the Principal or the Oblige toward the other with respect to the Contract Documents and the Agreement, and/or the reduction of any percentage to be retained by the Oblige as permitted by the Contract Documents and by the Agreement, shall not release in any manner whatsoever, the Principal and the Surety, or either of them, their heirs, executors, administrators, successors and assigns, from liability and obligations under this Bond; and the Surety, for value received, does waive notice of any such alterations, changes, additions, extensions of time acts of forbearance and/or reduction of retained percentage.

Provided, that it is expressly agreed that this Bond shall be deemed amended automatically and immediately, without formal and separate amendments hereto, upon amendment to the Contract Documents not increasing the contract price more than twenty percent (20%), so as to bind the Principal and the Surety to the full and faithful performance of the Contract Documents as so amended. The term "Amendment", wherever used in this Bond and whether referring to this Bond, the Contract Documents, or the Agreement, shall include any alteration, addition, extension or modification of any character whatsoever.

Provided, further, that no final settlement between the Obligee and the Principal shall abridge the right of any beneficiary, whose claim may be unsatisfied.

If the Principal is a foreign corporation (incorporated under any laws other than those of the Commonwealth of Pennsylvania) then further terms and conditions of this Bond are and shall be that the Principal or the Surety shall not be discharged from liability on this Bond, nor this Bond surrendered until such Principal files with the Obligee a certificate from the Pennsylvania Department of Revenue evidencing the payment in full of all bonus taxes, penalties and interest, and a certificate from the Bureau of Employment and Unemployment Compensation of the Pennsylvania Department of Labor and Industry, evidence the payment of all unemployment compensation, contributions, penalties and interest due the Commonwealth from said Principal or any foreign corporations, subcontractors thereunder or for which liability has accrued but the time for payment has not arrived, all in accordance with provisions of the Act of June 10, 1947, P.L. 493, of the Commonwealth of Pennsylvania.

IN WITNESS WHEREOF, the Principal and the Surety cause this Bond to be signed, sealed and delivered this _____ day of _____, 20_____.

(Individual Principal)

WITNESS:

(Signature of Individual)
trading and doing business as

* * * * *

(Partnership Principal)

WITNESS:

(Name of Partnership)

BY: _____ (SEAL)
Partner

BY: _____ (SEAL)

Partner

BY: _____(SEAL)
Partner

(Corporation Principal)

ATTEST:

(Name of Corporation)

(Secretary) BY: _____
(President)

(CORPORATE SEAL)

or (if appropriate)

WITNESS:

(Name of Corporation)

*BY: _____
(Authorized Representative)

*Attach appropriate proof, dated as of the same date as the Bond, evidencing authority to execute in behalf of the corporation.

**BY: _____
(Attorney-in-fact)

**Attach an appropriate power of attorney, dated as of the same date as the Bond, evidencing the authority of the Attorney-in-fact to act in behalf of the corporation.



AIA® Document A201® – 2017

General Conditions of the Contract for Construction

for the following PROJECT:

(Name and location or address)

Coopertown Elementary School Additions and Renovations
800 Coopertown Road
Bryn Mawr, PA

THE OWNER:

(Name, legal status and address)

School District of Haverford Township
50 East Eagle Road
Havertown, PA 19083

THE ARCHITECT:

(Name, legal status and address)

Crabtree Rohrbaugh & Associates
401 East Winding Hill Road
Mechanicsburg, PA 17055
: 717-458-0272

THE OWNER REPRESENTATIVE:

C.B. Development Services, Inc.
1617 JFK Boulevard, Suite 1090
Philadelphia PA 19010

TABLE OF ARTICLES

1	GENERAL PROVISIONS
2	OWNER
3	CONTRACTOR
4	ARCHITECT
5	SUBCONTRACTORS
6	CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS
7	CHANGES IN THE WORK
8	TIME
9	PAYMENTS AND COMPLETION
10	PROTECTION OF PERSONS AND PROPERTY

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. A vertical line in the left margin of this document indicates where the author has added necessary information and where the author has added to or deleted from the original AIA text.

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

For guidance in modifying this document to include supplementary conditions, see AIA Document A503™, Guide for Supplementary Conditions.

Init.

/

AIA Document A201 – 2017. Copyright © 1911, 1915, 1918, 1925, 1937, 1951, 1958, 1961, 1963, 1966, 1970, 1976, 1987, 1997, 2007 and 2017. All rights reserved. "The American Institute of Architects," "American Institute of Architects," "AIA," the AIA Logo, and "AIA Contract Documents" are trademarks of The American Institute of Architects. This document was produced at 15:27:54 ET on 05/20/2024 under Order No.2114535485 which expires on 05/19/2025, is not for resale, is licensed for one-time use only, and may only be used in accordance with the AIA Contract Documents® Terms of Service. To report copyright violations, e-mail docinfo@aiacontracts.com.

User Notes:

(1651718246)

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, 3.3.2, 3.12.8, 3.18, 4.2.3, 8.3.1, 9.5.1, 10.2.5,
10.2.8, 13.3.2, 14.1, 15.1.2, 15.2

Addenda

1.1.1

Additional Costs, Claims for

3.7.4, 3.7.5, 10.3.2, 15.1.5

Additional Inspections and Testing

9.4.2, 9.8.3, 12.2.1, **13.4**

Additional Time, Claims for

3.2.4, 3.7.4, 3.7.5, 3.10.2, 8.3.2, **15.1.6**

Administration of the Contract

3.1.3, **4.2**, 9.4, 9.5

Advertisement or Invitation to Bid

1.1.1

Aesthetic Effect

4.2.13

Allowances

3.8

Applications for Payment

4.2.5, 7.3.9, 9.2, **9.3**, 9.4, 9.5.1, 9.5.4, 9.6.3, 9.7, 9.10

Approvals

2.1.1, 2.3.1, 2.5, 3.1.3, 3.10.2, 3.12.8, 3.12.9,
3.12.10.1, 4.2.7, 9.3.2, 13.4.1

Arbitration

8.3.1, 15.3.2, **15.4**

ARCHITECT

4

Architect, Definition of

4.1.1

Architect, Extent of Authority

2.5, 3.12.7, 4.1.2, 4.2, 5.2, 6.3, 7.1.2, 7.3.4, 7.4, 9.2,
9.3.1, 9.4, 9.5, 9.6.3, 9.8, 9.10.1, 9.10.3, 12.1, 12.2.1,
13.4.1, 13.4.2, 14.2.2, 14.2.4, 15.1.4, 15.2.1

Architect, Limitations of Authority and Responsibility

2.1.1, 3.12.4, 3.12.8, 3.12.10, 4.1.2, 4.2.1, 4.2.2, 4.2.3,
4.2.6, 4.2.7, 4.2.10, 4.2.12, 4.2.13, 5.2.1, 7.4, 9.4.2,
9.5.4, 9.6.4, 15.1.4, 15.2

Architect's Additional Services and Expenses

2.5, 12.2.1, 13.4.2, 13.4.3, 14.2.4

Architect's Administration of the Contract

3.1.3, 3.7.4, 15.2, 9.4.1, 9.5

Architect's Approvals

2.5, 3.1.3, 3.5, 3.10.2, 4.2.7

Architect's Authority to Reject Work

3.5, 4.2.6, 12.1.2, 12.2.1

Architect's Copyright

1.1.7, 1.5

Architect's Decisions

3.7.4, 4.2.6, 4.2.7, 4.2.11, 4.2.12, 4.2.13, 4.2.14, 6.3,
7.3.4, 7.3.9, 8.1.3, 8.3.1, 9.2, 9.4.1, 9.5, 9.8.4, 9.9.1,
13.4.2, 15.2

Architect's Inspections

3.7.4, 4.2.2, 4.2.9, 9.4.2, 9.8.3, 9.9.2, 9.10.1, 13.4

Architect's Instructions

3.2.4, 3.3.1, 4.2.6, 4.2.7, 13.4.2

Architect's Interpretations

4.2.11, 4.2.12

Architect's Project Representative

4.2.10

Architect's Relationship with Contractor

1.1.2, 1.5, 2.3.3, 3.1.3, 3.2.2, 3.2.3, 3.2.4, 3.3.1, 3.4.2,
3.5, 3.7.4, 3.7.5, 3.9.2, 3.9.3, 3.10, 3.11, 3.12, 3.16,
3.18, 4.1.2, 4.2, 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, 12, 13.3.2, 13.4, 15.2

Architect's Relationship with Subcontractors

1.1.2, 4.2.3, 4.2.4, 4.2.6, 9.6.3, 9.6.4, 11.3

Architect's Representations

9.4.2, 9.5.1, 9.10.1

Architect's Site Visits

3.7.4, 4.2.2, 4.2.9, 9.4.2, 9.5.1, 9.9.2, 9.10.1, 13.4

Asbestos

10.3.1

Attorneys' Fees

3.18.1, 9.6.8, 9.10.2, 10.3.3

Award of Separate 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

Binding Dispute Resolution

8.3.1, 9.7, 11.5, 13.1, 15.1.2, 15.1.3, 15.2.1, 15.2.5,
15.2.6.1, 15.3.1, 15.3.2, 15.3.3, 15.4.1

Bonds, Lien

7.3.4.4, 9.6.8, 9.10.2, 9.10.3

Bonds, Performance, and Payment

7.3.4.4, 9.6.7, 9.10.3, **11.1.2**, 11.1.3, **11.5**

Building Information Models Use and Reliance

1.8

Building Permit

3.7.1

Capitalization

1.3

Certificate of Substantial Completion

9.8.3, 9.8.4, 9.8.5

Certificates for Payment

4.2.1, 4.2.5, 4.2.9, 9.3.3, **9.4**, 9.5, 9.6.1, 9.6.6, 9.7, 9.10.1, 9.10.3, 14.1.1.3, 14.2.4, 15.1.4

Certificates of Inspection, Testing or Approval
13.4.4

Certificates of Insurance
9.10.2

Change Orders

1.1.1, 3.4.2, 3.7.4, 3.8.2.3, 3.11, 3.12.8, 4.2.8, 5.2.3, 7.1.2, 7.1.3, **7.2**, 7.3.2, 7.3.7, 7.3.9, 7.3.10, 8.3.1, 9.3.1.1, 9.10.3, 10.3.2, 11.2, 11.5, 12.1.2

Change Orders, Definition of

7.2.1

CHANGES IN THE WORK

2.2.2, 3.11, 4.2.8, **7**, 7.2.1, 7.3.1, 7.4, 8.3.1, 9.3.1.1, 11.5

Claims, Definition of

15.1.1

Claims, Notice of
1.6.2, 15.1.3

CLAIMS AND DISPUTES

3.2.4, 6.1.1, 6.3, 7.3.9, 9.3.3, 9.10.4, 10.3.3, **15**, 15.4

Claims and Timely Assertion of Claims
15.4.1

Claims for Additional Cost

3.2.4, 3.3.1, 3.7.4, 7.3.9, 9.5.2, 10.2.5, 10.3.2, **15.1.5**

Claims for Additional Time

3.2.4, 3.3.1, 3.7.4, 6.1.1, 8.3.2, 9.5.2, 10.3.2, **15.1.6**

Concealed or Unknown Conditions, Claims for

3.7.4

Claims for Damages
3.2.4, 3.18, 8.3.3, 9.5.1, 9.6.7, 10.2.5, 10.3.3, 11.3, 11.3.2, 14.2.4, 15.1.7

Claims Subject to Arbitration
15.4.1

Cleaning Up

3.15, 6.3

Commencement of the Work, Conditions Relating to
2.2.1, 3.2.2, 3.4.1, 3.7.1, 3.10.1, 3.12.6, 5.2.1, 5.2.3, 6.2.2, 8.1.2, 8.2.2, 8.3.1, 11.1, 11.2, **15.1.5**

Commencement of the Work, Definition of

8.1.2

Communications

3.9.1, **4.2.4**

Completion, Conditions Relating to
3.4.1, 3.11, 3.15, 4.2.2, 4.2.9, 8.2, 9.4.2, 9.8, 9.9.1, 9.10, 12.2, 14.1.2, 15.1.2

COMPLETION, PAYMENTS AND

9

Completion, Substantial
3.10.1, 4.2.9, 8.1.1, 8.1.3, 8.2.3, 9.4.2, 9.8, 9.9.1, 9.10.3, 12.2, 15.1.2

Compliance with Laws

2.3.2, 3.2.3, 3.6, 3.7, 3.12.10, 3.13, 9.6.4, 10.2.2, 13.1, 13.3, 13.4.1, 13.4.2, 13.5, 14.1.1, 14.2.1.3, 15.2.8, 15.4.2, 15.4.3

Concealed or Unknown Conditions

3.7.4, 4.2.8, 8.3.1, 10.3

Conditions of the Contract

1.1.1, 6.1.1, 6.1.4

Consent, Written

3.4.2, 3.14.2, 4.1.2, 9.8.5, 9.9.1, 9.10.2, 9.10.3, 13.2, 15.4.4.2

Consolidation or Joinder

15.4.4

CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS

1.1.4, **6**

Construction Change Directive, Definition of
7.3.1

Construction Change Directives

1.1.1, 3.4.2, 3.11, 3.12.8, 4.2.8, 7.1.1, 7.1.2, 7.1.3, **7.3**, 9.3.1.1

Construction Schedules, Contractor's

3.10, 3.11, 3.12.1, 3.12.2, 6.1.3, 15.1.6.2

Contingent Assignment of Subcontracts

5.4, 14.2.2.2

Continuing Contract Performance

15.1.4

Contract, Definition of

1.1.2

CONTRACT, TERMINATION OR SUSPENSION OF THE

5.4.1.1, 5.4.2, 11.5, **14**

Contract Administration

3.1.3, 4, 9.4, 9.5

Contract Award and Execution, Conditions Relating to

3.7.1, 3.10, 5.2, 6.1

Contract Documents, Copies Furnished and Use of
1.5.2, 2.3.6, 5.3

Contract Documents, Definition of

1.1.1

Contract Sum

2.2.2, 2.2.4, 3.7.4, 3.7.5, 3.8, 3.10.2, 5.2.3, 7.3, 7.4, **9.1**, 9.2, 9.4.2, 9.5.1.4, 9.6.7, 9.7, 10.3.2, 11.5, 12.1.2, 12.3, 14.2.4, 14.3.2, 15.1.4.2, **15.1.5**, **15.2.5**

Contract Sum, Definition of

9.1

Contract Time

1.1.4, 2.2.1, 2.2.2, 3.7.4, 3.7.5, 3.10.2, 5.2.3, 6.1.5, 7.2.1.3, 7.3.1, 7.3.5, 7.3.6, 7, 7, 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, 12.1.2, 14.3.2, 15.1.4.2, 15.1.6.1, 15.2.5

Contract Time, Definition of

8.1.1

CONTRACTOR

3

Contractor, Definition of

3.1, **6.1.2**

Contractor's Construction and Submittal Schedules

3.10, 3.12.1, 3.12.2, 4.2.3, 6.1.3, 15.1.6.2

Contractor's Employees
2.2.4, 3.3.2, 3.4.3, 3.8.1, 3.9, 3.18.2, 4.2.3, 4.2.6, 10.2,
10.3, 11.3, 14.1, 14.2.1.1

Contractor's Liability Insurance
11.1
Contractor's Relationship with Separate Contractors
and Owner's Forces
3.12.5, 3.14.2, 4.2.4, 6, 11.3, 12.2.4
Contractor's Relationship with Subcontractors
1.2.2, 2.2.4, 3.3.2, 3.18.1, 3.18.2, 4.2.4, 5, 9.6.2, 9.6.7,
9.10.2, 11.2, 11.3, 11.4
Contractor's Relationship with the Architect
1.1.2, 1.5, 2.3.3, 3.1.3, 3.2.2, 3.2.3, 3.2.4, 3.3.1, 3.4.2,
3.5.1, 3.7.4, 3.10, 3.11, 3.12, 3.16, 3.18, 4.2, 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, 12, 13.4, 15.1.3, 15.2.1
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
2.2.2, 9.7
Contractor's Right to Terminate the Contract
14.1
Contractor's Submittals
3.10, 3.11, 3.12, 4.2.7, 5.2.1, 5.2.3, 9.2, 9.3, 9.8.2,
9.8.3, 9.9.1, 9.10.2, 9.10.3
Contractor's Superintendent
3.9, 10.2.6
Contractor's Supervision and Construction
Procedures
1.2.2, 3.3, 3.4, 3.12.10, 4.2.2, 4.2.7, 6.1.3, 6.2.4, 7.1.3,
7.3.4, 7.3.6, 8.2, 10, 12, 14, 15.1.4
Coordination and Correlation
1.2, 3.2.1, 3.3.1, 3.10, 3.12.6, 6.1.3, 6.2.1
Copies Furnished of Drawings and Specifications
1.5, 2.3.6, 3.11
Copyrights
1.5, **3.17**
Correction of Work
2.5, 3.7.3, 9.4.2, 9.8.2, 9.8.3, 9.9.1, 12.1.2, **12.2**, 12.3,
15.1.3.1, 15.1.3.2, 15.2.1
Correlation and Intent of the Contract Documents
1.2
Cost, Definition of
7.3.4
Costs
2.5, 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, 7.3.4, 7.3.8, 7.3.9, 9.10.2, 10.3.2, 10.3.6, 11.2,
12.1.2, 12.2.1, 12.2.4, 13.4, 14
Cutting and Patching
3.14, 6.2.5

Damage to Construction of Owner or Separate
Contractors
3.14.2, 6.2.4, 10.2.1.2, 10.2.5, 10.4, 12.2.4
Damage to the Work
3.14.2, 9.9.1, 10.2.1.2, 10.2.5, 10.4, 12.2.4
Damages, Claims for
3.2.4, 3.18, 6.1.1, 8.3.3, 9.5.1, 9.6.7, 10.3.3, 11.3.2,
11.3, 14.2.4, 15.1.7
Damages for Delay
6.2.3, 8.3.3, 9.5.1.6, 9.7, 10.3.2, 14.3.2
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, 4.2.6, 4.2.7, 4.2.11, 4.2.12, 4.2.13, 6.3, 7.3.4,
7.3.9, 8.1.3, 8.3.1, 9.2, 9.4, 9.5.1, 9.8.4, 9.9.1, 13.4.2,
14.2.2, 14.2.4, 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
2.5, 3.5, 4.2.6, 6.2.3, 9.5.1, 9.5.3, 9.6.6, 9.8.2, 9.9.3,
9.10.4, 12.2.1
Definitions
1.1, 2.1.1, 3.1.1, 3.5, 3.12.1, 3.12.2, 3.12.3, 4.1.1, 5.1,
6.1.2, 7.2.1, 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, 7.2.1, 7.3.1, **7.4**, **8.3**, 9.5.1, **9.7**,
10.3.2, **10.4**, 14.3.2, **15.1.6**, 15.2.5
Digital Data Use and Transmission
1.7
Disputes
6.3, 7.3.9, 15.1, 15.2
Documents and Samples at the Site
3.11
Drawings, Definition of
1.1.5
Drawings and Specifications, Use and Ownership of
3.11
Effective Date of Insurance
8.2.2
Emergencies
10.4, 14.1.1.2, **15.1.5**
Employees, Contractor's
3.3.2, 3.4.3, 3.8.1, 3.9, 3.18.2, 4.2.3, 4.2.6, 10.2,
10.3.3, 11.3, 14.1, 14.2.1.1
Equipment, Labor, or Materials
1.1.3, 1.1.6, 3.4, 3.5, 3.8.2, 3.8.3, 3.12, 3.13, 3.15.1,
4.2.6, 4.2.7, 5.2.1, 6.2.1, 7.3.4, 9.3.2, 9.3.3, 9.5.1.3,
9.10.2, 10.2.1, 10.2.4, 14.2.1.1, 14.2.1.2
Execution and Progress of the Work
1.1.3, 1.2.1, 1.2.2, 2.3.4, 2.3.6, 3.1, 3.3.1, 3.4.1, 3.7.1,
3.10.1, 3.12, 3.14, 4.2, 6.2.2, 7.1.3, 7.3.6, 8.2, 9.5.1,
9.9.1, 10.2, 10.3, 12.1, 12.2, 14.2, 14.3.1, 15.1.4

Extensions of Time
3.2.4, 3.7.4, 5.2.3, 7.2.1, 7.3, 7.4, 9.5.1, 9.7, 10.3.2, 10.4, 14.3, 15.1.6, **15.2.5**

Failure of Payment
9.5.1.3, **9.7**, 9.10.2, 13.5, 14.1.1.3, 14.2.1.2

Faulty Work
(See Defective or Nonconforming Work)

Final Completion and Final Payment
4.2.1, 4.2.9, 9.8.2, **9.10**, 12.3, 14.2.4, 14.4.3

Financial Arrangements, Owner's
2.2.1, 13.2.2, 14.1.1.4

GENERAL PROVISIONS

1

Governing Law

13.1
Guarantees (See Warranty)

Hazardous Materials and Substances
10.2.4, **10.3**

Identification of Subcontractors and Suppliers
5.2.1

Indemnification
3.17, **3.18**, 9.6.8, 9.10.2, 10.3.3, 11.3

Information and Services Required of the Owner
2.1.2, **2.2**, 2.3, 3.2.2, 3.12.10.1, 6.1.3, 6.1.4, 6.2.5, 9.6.1, 9.9.2, 9.10.3, 10.3.3, 11.2, 13.4.1, 13.4.2, 14.1.1.4, 14.1.4, 15.1.4

Initial Decision
15.2

Initial Decision Maker, Definition of
1.1.8
Initial Decision Maker, Decisions
14.2.4, 15.1.4.2, 15.2.1, 15.2.2, 15.2.3, 15.2.4, 15.2.5
Initial Decision Maker, Extent of Authority
14.2.4, 15.1.4.2, 15.2.1, 15.2.2, 15.2.3, 15.2.4, 15.2.5

Injury or Damage to Person or Property
10.2.8, 10.4

Inspections
3.1.3, 3.3.3, 3.7.1, 4.2.2, 4.2.6, 4.2.9, 9.4.2, 9.8.3, 9.9.2, 9.10.1, 12.2.1, 13.4

Instructions to Bidders
1.1.1

Instructions to the Contractor
3.2.4, 3.3.1, 3.8.1, 5.2.1, 7, 8.2.2, 12, 13.4.2

Instruments of Service, Definition of
1.1.7

Insurance
6.1.1, 7.3.4, 8.2.2, 9.3.2, 9.8.4, 9.9.1, 9.10.2, 10.2.5, **11**

Insurance, Notice of Cancellation or Expiration
11.1.4, 11.2.3

Insurance, Contractor's Liability
11.1
Insurance, Effective Date of
8.2.2, 14.4.2

Insurance, Owner's Liability
11.2

Insurance, Property
10.2.5, 11.2, 11.4, 11.5

Insurance, Stored Materials
9.3.2

INSURANCE AND BONDS
11

Insurance Companies, Consent to Partial Occupancy
9.9.1

Insured loss, Adjustment and Settlement of
11.5

Intent of the Contract Documents
1.2.1, 4.2.7, 4.2.12, 4.2.13

Interest
13.5

Interpretation
1.1.8, 1.2.3, **1.4**, 4.1.1, 5.1, 6.1.2, 15.1.1

Interpretations, Written
4.2.11, 4.2.12

Judgment on Final Award
15.4.2

Labor and Materials, Equipment
1.1.3, 1.1.6, **3.4**, 3.5, 3.8.2, 3.8.3, 3.12, 3.13, 3.15.1, 5.2.1, 6.2.1, 7.3.4, 9.3.2, 9.3.3, 9.5.1.3, 9.10.2, 10.2.1, 10.2.4, 14.2.1.1, 14.2.1.2

Labor Disputes
8.3.1

Laws and Regulations
1.5, 2.3.2, 3.2.3, 3.2.4, 3.6, 3.7, 3.12.10, 3.13, 9.6.4, 9.9.1, 10.2.2, 13.1, 13.3.1, 13.4.2, 13.5, 14, 15.2.8, 15.4

Liens
2.1.2, 9.3.1, 9.3.3, 9.6.8, 9.10.2, 9.10.4, 15.2.8

Limitations, Statutes of
12.2.5, 15.1.2, 15.4.1.1

Limitations of Liability
3.2.2, 3.5, 3.12.10, 3.12.10.1, 3.17, 3.18.1, 4.2.6, 4.2.7, 6.2.2, 9.4.2, 9.6.4, 9.6.7, 9.6.8, 10.2.5, 10.3.3, 11.3, 12.2.5, 13.3.1

Limitations of Time
2.1.2, 2.2, 2.5, 3.2.2, 3.10, 3.11, 3.12.5, 3.15.1, 4.2.7, 5.2, 5.3, 5.4.1, 6.2.4, 7.3, 7.4, 8.2, 9.2, 9.3.1, 9.3.3, 9.4.1, 9.5, 9.6, 9.7, 9.8, 9.9, 9.10, 12.2, 13.4, 14, 15, 15.1.2, 15.1.3, 15.1.5

Materials, Hazardous
10.2.4, **10.3**

Materials, Labor, Equipment and
1.1.3, 1.1.6, 3.4.1, 3.5, 3.8.2, 3.8.3, 3.12, 3.13, 3.15.1, 5.2.1, 6.2.1, 7.3.4, 9.3.2, 9.3.3, 9.5.1.3, 9.10.2, 10.2.1.2, 10.2.4, 14.2.1.1, 14.2.1.2

Means, Methods, Techniques, Sequences and Procedures of Construction
3.3.1, 3.12.10, 4.2.2, 4.2.7, 9.4.2

Mechanic's Lien
2.1.2, 9.3.1, 9.3.3, 9.6.8, 9.10.2, 9.10.4, 15.2.8

Mediation
8.3.1, 15.1.3.2, 15.2.1, 15.2.5, 15.2.6, **15.3**, 15.4.1, 15.4.1.1

Minor Changes in the Work
1.1.1, 3.4.2, 3.12.8, 4.2.8, 7.1, **7.4**

MISCELLANEOUS PROVISIONS

13

Modifications, Definition of

1.1.1

Modifications to the Contract

1.1.1, 1.1.2, 2.5, 3.11, 4.1.2, 4.2.1, 5.2.3, 7, 8.3.1, 9.7, 10.3.2

Mutual Responsibility

6.2

Nonconforming Work, Acceptance of

9.6.6, 9.9.3, **12.3**

Nonconforming Work, Rejection and Correction of
2.4, 2.5, 3.5, 4.2.6, 6.2.4, 9.5.1, 9.8.2, 9.9.3, 9.10.4, 12.2

Notice

1.6, 1.6.1, 1.6.2, 2.1.2, 2.2.2., 2.2.3, 2.2.4, 2.5, 3.2.4, 3.3.1, 3.7.4, 3.7.5, 3.9.2, 3.12.9, 3.12.10, 5.2.1, 7.4, 8.2.2, 9.6.8, 9.7, 9.10.1, 10.2.8, 10.3.2, 11.5, 12.2.2.1, 13.4.1, 13.4.2, 14.1, 14.2.2, 14.4.2, 15.1.3, 15.1.5, 15.1.6, 15.4.1

Notice of Cancellation or Expiration of Insurance

11.1.4, 11.2.3

Notice of Claims

1.6.2, 2.1.2, 3.7.4, 9.6.8, 10.2.8, **15.1.3**, 15.1.5, 15.1.6, 15.2.8, 15.3.2, 15.4.1

Notice of Testing and Inspections

13.4.1, 13.4.2

Observations, Contractor's

3.2, 3.7.4

Occupancy

2.3.1, 9.6.6, 9.8

Orders, Written

1.1.1, 2.4, 3.9.2, 7, 8.2.2, 11.5, 12.1, 12.2.2.1, 13.4.2, 14.3.1

OWNER

2

Owner, Definition of

2.1.1

Owner, Evidence of Financial Arrangements

2.2, 13.2.2, 14.1.1.4

Owner, Information and Services Required of the

2.1.2, **2.2**, 2.3, 3.2.2, 3.12.10, 6.1.3, 6.1.4, 6.2.5, 9.3.2, 9.6.1, 9.6.4, 9.9.2, 9.10.3, 10.3.3, 11.2, 13.4.1, 13.4.2, 14.1.1.4, 14.1.4, 15.1.4

Owner's Authority

1.5, 2.1.1, 2.3.32.4, 2.5, 3.4.2, 3.8.1, 3.12.10, 3.14.2, 4.1.2, 4.2.4, 4.2.9, 5.2.1, 5.2.4, 5.4.1, 6.1, 6.3, 7.2.1, 7.3.1, 8.2.2, 8.3.1, 9.3.2, 9.5.1, 9.6.4, 9.9.1, 9.10.2, 10.3.2, 11.4, 11.5, 12.2.2, 12.3, 13.2.2, 14.3, 14.4, 15.2.7

Owner's Insurance

11.2

Owner's Relationship with Subcontractors

1.1.2, 5.2, 5.3, 5.4, 9.6.4, 9.10.2, 14.2.2

Owner's Right to Carry Out the Work

2.5, 14.2.2

Owner's Right to Clean Up

6.3

Owner's Right to Perform Construction and to Award Separate Contracts

6.1

Owner's Right to Stop the Work

2.4

Owner's Right to Suspend the Work

14.3

Owner's Right to Terminate the Contract

14.2, 14.4

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

1.1.1, 1.1.6, 1.1.7, **1.5**, 2.3.6, 3.2.2, 3.11, 3.17, 4.2.12, 5.3

Partial Occupancy or Use

9.6.6, **9.9**

Patching, Cutting and

3.14, 6.2.5

Patents

3.17

Payment, Applications for

4.2.5, 7.3.9, 9.2, **9.3**, 9.4, 9.5, 9.6.3, 9.7, 9.8.5, 9.10.1, 14.2.3, 14.2.4, 14.4.3

Payment, Certificates for

4.2.5, 4.2.9, 9.3.3, **9.4**, 9.5, 9.6.1, 9.6.6, 9.7, 9.10.1, 9.10.3, 14.1.1.3, 14.2.4

Payment, Failure of

9.5.1.3, **9.7**, 9.10.2, 13.5, 14.1.1.3, 14.2.1.2

Payment, Final

4.2.1, 4.2.9, **9.10**, 12.3, 14.2.4, 14.4.3

Payment Bond, Performance Bond and

7.3.4.4, 9.6.7, 9.10.3, **11.1.2**

Payments, Progress

9.3, **9.6**, 9.8.5, 9.10.3, 14.2.3, 15.1.4

PAYMENTS AND COMPLETION

9

Payments to Subcontractors

5.4.2, 9.5.1.3, 9.6.2, 9.6.3, 9.6.4, 9.6.7, 14.2.1.2
PCB

10.3.1

Performance Bond and Payment Bond

7.3.4.4, 9.6.7, 9.10.3, **11.1.2**

Permits, Fees, Notices and Compliance with Laws

2.3.1, **3.7**, 3.13, 7.3.4.4, 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**, 4.2.7

Progress and Completion

4.2.2, **8.2**, 9.8, 9.9.1, 14.1.4, 15.1.4

Progress Payments

9.3, **9.6**, 9.8.5, 9.10.3, 14.2.3, 15.1.4

Project, Definition of

1.1.4

Project Representatives

4.2.10

Property Insurance

10.2.5, **11.2**

Proposal Requirements

1.1.1

PROTECTION OF PERSONS AND PROPERTY

10

Regulations and Laws

1.5, 2.3.2, 3.2.3, 3.6, 3.7, 3.12.10, 3.13, 9.6.4, 9.9.1, 10.2.2, 13.1, 13.3, 13.4.1, 13.4.2, 13.5, 14, 15.2.8, 15.4

Rejection of Work

4.2.6, 12.2.1

Releases and Waivers of Liens

9.3.1, 9.10.2

Representations

3.2.1, 3.5, 3.12.6, 8.2.1, 9.3.3, 9.4.2, 9.5.1, 9.10.1

Representatives

2.1.1, 3.1.1, 3.9, 4.1.1, 4.2.10, 13.2.1

Responsibility for Those Performing the Work

3.3.2, 3.18, 4.2.2, 4.2.3, 5.3, 6.1.3, 6.2, 6.3, 9.5.1, 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

3.2, 3.12.7, 6.1.3

Review of Contractor's Submittals by Owner and Architect

3.10.1, 3.10.2, 3.11, 3.12, 4.2, 5.2, 6.1.3, 9.2, 9.8.2

Review of Shop Drawings, Product Data and Samples by Contractor

3.12

Rights and Remedies

1.1.2, 2.4, 2.5, 3.5, 3.7.4, 3.15.2, 4.2.6, 5.3, 5.4, 6.1, 6.3, 7.3.1, 8.3, 9.5.1, 9.7, 10.2.5, 10.3, 12.2.1, 12.2.2, 12.2.4, **13.3**, 14, 15.4

Royalties, Patents and Copyrights

3.17

Rules and Notices for Arbitration

15.4.1

Safety of Persons and Property

10.2, 10.4

Safety Precautions and Programs

3.3.1, 4.2.2, 4.2.7, 5.3, **10.1**, 10.2, 10.4

Samples, Definition of

3.12.3

Samples, Shop Drawings, Product Data and

3.11, **3.12**, 4.2.7

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, 6.1.3, 15.1.6.2

Separate Contracts and Contractors

1.1.4, 3.12.5, 3.14.2, 4.2.4, 4.2.7, 6, 8.3.1, 12.1.2

Separate Contractors, Definition of

6.1.1

Shop Drawings, Definition of

3.12.1

Shop Drawings, Product Data and Samples

3.11, **3.12**, 4.2.7

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, 9.9.2, 9.4.2, 9.10.1, 13.4

Site Visits, Architect's

3.7.4, 4.2.2, 4.2.9, 9.4.2, 9.5.1, 9.9.2, 9.10.1, 13.4

Special Inspections and Testing

4.2.6, 12.2.1, 13.4

Specifications, Definition of

1.1.6

Specifications

1.1.1, **1.1.6**, 1.2.2, 1.5, 3.12.10, 3.17, 4.2.14

Statute of Limitations

15.1.2, 15.4.1.1

Stopping the Work

2.2.2, 2.4, 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, 3.18, 4.2.3, 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, 9.10, 10.2.1, 14.1, 14.2.1

Submittals

3.10, 3.11, 3.12, 4.2.7, 5.2.1, 5.2.3, 7.3.4, 9.2, 9.3, 9.8,

9.9.1, 9.10.2, 9.10.3

Submittal Schedule

3.10.2, 3.12.5, 4.2.7

Subrogation, Waivers of

6.1.1, **11.3**

Substances, Hazardous

10.3

Substantial Completion

4.2.9, 8.1.1, 8.1.3, 8.2.3, 9.4.2, **9.8**, 9.9.1, 9.10.3, 12.2, 15.1.2

Substantial Completion, Definition of

9.8.1

Substitution of Subcontractors

5.2.3, 5.2.4

Substitution of Architect

2.3.3

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, 4.2.7, 6.1.3, 6.2.4, 7.1.3, 7.3.4, 8.2, 8.3.1, 9.4.2, 10, 12, 14, 15.1.4

Suppliers

1.5, 3.12.1, 4.2.4, 4.2.6, 5.2.1, 9.3, 9.4.2, 9.5.4, 9.6, 9.10.5, 14.2.1

Surety

5.4.1.2, 9.6.8, 9.8.5, 9.10.2, 9.10.3, 11.1.2, 14.2.2, 15.2.7

Surety, Consent of

9.8.5, 9.10.2, 9.10.3

Surveys

1.1.7, 2.3.4

Suspension by the Owner for Convenience

14.3

Suspension of the Work

3.7.5, 5.4.2, 14.3

Suspension or Termination of the Contract

5.4.1.1, 14

Taxes

3.6, 3.8.2.1, 7.3.4.4

Termination by the Contractor

14.1, 15.1.7

Termination by the Owner for Cause

5.4.1.1, **14.2**, 15.1.7

Termination by the Owner for Convenience

14.4

Termination of the Architect

2.3.3

Termination of the Contractor Employment

14.2.2

TERMINATION OR SUSPENSION OF THE CONTRACT

14

Tests and Inspections

3.1.3, 3.3.3, 3.7.1, 4.2.2, 4.2.6, 4.2.9, 9.4.2, 9.8.3, 9.9.2, 9.10.1, 10.3.2, 12.2.1, **13.4**

TIME

8

Time, Delays and Extensions of

3.2.4, 3.7.4, 5.2.3, 7.2.1, 7.3.1, 7.4, **8.3**, 9.5.1, 9.7, 10.3.2, 10.4, 14.3.2, 15.1.6, 15.2.5

Time Limits

2.1.2, 2.2, 2.5, 3.2.2, 3.10, 3.11, 3.12.5, 3.15.1, 4.2, 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, 9.5, 9.6, 9.7, 9.8, 9.9, 9.10, 12.2, 13.4, 14, 15.1.2, 15.1.3, 15.4

Time Limits on Claims

3.7.4, 10.2.8, 15.1.2, 15.1.3

Title to Work

9.3.2, 9.3.3

UNCOVERING AND CORRECTION OF WORK

Uncovering of Work

12.1

Unforeseen Conditions, Concealed or Unknown

3.7.4, 8.3.1, 10.3

Unit Prices

7.3.3.2, 9.1.2

Use of Documents

1.1.1, 1.5, 2.3.6, 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

13.3.2

Waiver of Claims by the Contractor

9.10.5, 13.3.2, **15.1.7**

Waiver of Claims by the Owner

9.9.3, 9.10.3, 9.10.4, 12.2.2.1, 13.3.2, 14.2.4, **15.1.7**

Waiver of Consequential Damages

14.2.4, 15.1.7

Waiver of Liens

9.3, 9.10.2, 9.10.4

Waivers of Subrogation

6.1.1, **11.3**

Warranty

3.5, 4.2.9, 9.3.3, 9.8.4, 9.9.1, 9.10.2, 9.10.4, 12.2.2, 15.1.2

Weather Delays

8.3, 15.1.6.2

Work, Definition of

1.1.3

Written Consent

1.5.2, 3.4.2, 3.7.4, 3.12.8, 3.14.2, 4.1.2, 9.3.2, 9.10.3, 13.2, 13.3.2, 15.4.4.2

Written Interpretations

4.2.11, 4.2.12

Written Orders

1.1.1, 2.4, 3.9, 7, 8.2.2, 12.1, 12.2, 13.4.2, 14.3.1

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) and consist of the Agreement, the documents listed in the Project Manual, including, but not limited to, the Instructions to Bidders, the Supplementary Instructions to Bidders, the Bid Bond, the Payment Bond, the Performance Bond, the Conditions of the Contract (General, Supplementary and other Conditions), Drawings, and Specifications (other than those identified as "for informational purposes only"), Addenda issued prior to execution of the Contract (other than those identified as "for informational purposes only"), 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.

§ 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 a Subcontractor or a Sub-subcontractor, (3) between the Owner and the Architect or the Architect's consultants, or (4) between any persons or entities other than the Owner and the Contractor, except as set forth in paragraph 3.3.7. The Architect shall, however, be entitled to performance and enforcement of obligations under the Contract intended to facilitate performance of the Architect's 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.

§ 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 the Owner and by Separate Contractors.

§ 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 Owner Representative as is identified in the Agreement and is responsible to render initial decisions on Claims in accordance with Section 15.2. The Initial Decision Maker shall not show partiality to the Owner or Contractor and shall not be liable for results of interpretations or decisions rendered in good faith.

§ 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.

§ 1.2.1.1 The invalidity of any provision of the Contract Documents shall not invalidate the Contract or its remaining provisions. If it is determined that any provision of the Contract Documents violates any law, or is otherwise invalid or unenforceable, then that provision shall be revised to the extent necessary to make that provision legal and enforceable. In such case the Contract Documents shall be construed, to the fullest extent permitted by law, to give effect to the parties' intentions and purposes in executing the Contract.

§ 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.

§ 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. Typographical and spelling errors shall be interpreted by the Architect for their obvious meaning and intent. References throughout the Contract Documents expressed in the singular number shall mean one or more like items as may be required to complete the Work. Likewise, plural references that obviously imply only one item shall mean only one item.

§ 1.2.4 In the case of an inconsistency within or between Contract Documents not clarified by Addendum, the better quality or greater quantity of Work shall be provided in accordance with Architect's interpretation. Such conflict shall be promptly referred to the Architect and Owner Representative for interpretation and final decision.

§ 1.2.5 Where the Work is shown in complete detail on only half or portion of a Drawing or there is an indication of continuation, the remainder being shown in outline, the Work drawn out in detail shall be understood to apply to other like portions of the structure.

§ 1.2.6 On all Work of a remodeling nature or installation within the present buildings, it will be the responsibility of the Contractor, by personal inspection, to satisfy himself as to the correctness of any information given which may affect the quantity, size, and quality of materials required for a satisfactorily completed Contract, whether or not such information is indicated on the Drawings or within the Specifications.

§ 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 retain all common law, statutory, and other reserved rights in their Instruments of Service, including copyrights. The Contractor, Subcontractors, Sub-subcontractors, and suppliers shall not own or claim a copyright in the Instruments of Service. Submittal or distribution to meet official regulatory requirements or for other purposes in connection with the Project is not to be construed as publication in derogation of the Architect's or Architect's consultants' reserved rights.

§ 1.5.2 The Contractor, Subcontractors, Sub-subcontractors, and suppliers are authorized to use and reproduce the Instruments of Service provided to them, subject to any protocols established pursuant to Sections 1.7 and 1.8, 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 suppliers may not use the Instruments of Service on other projects or for additions to the Project outside the scope of the Work without the specific written consent of the Owner, Architect, and the Architect's consultants.

§ 1.6 Notice

§ 1.6.1 Except as otherwise provided in Section 1.6.2, where the Contract Documents require one party to notify or give notice to the other party, such notice shall be provided in writing to the designated representative of the party to

whom the notice is addressed and shall be deemed to have been duly served if delivered in person, by mail, by courier, or by electronic transmission if a method for electronic transmission is set forth in the Agreement.

§ 1.6.2 Notice of Claims as provided in Section 15.1.3 shall be provided in writing and shall be deemed to have been duly served only if delivered to the designated representative of the party to whom the notice is addressed by certified or registered mail, or by courier providing proof of delivery.

§ 1.7 Digital Data Use and Transmission

The parties shall agree upon protocols governing the transmission and use of Instruments of Service or any other information or documentation in digital form. The parties will use AIA Document E203™–2013, Building Information Modeling and Digital Data Exhibit, to establish the protocols for the development, use, transmission, and exchange of digital data.

§ 1.7.1 The Architect may, with the concurrence of the Owner, furnish to the Contractors versions of Instruments of Service in electronic form. The Contract Documents executed or identified in accordance with Subparagraph 1.2.1 shall prevail in case of an inconsistency with subsequent versions made through manipulatable electronic operations involving computers.

§ 1.7.2 The Contractor shall not transfer or reuse Instruments of Service in electronic or machine-readable form without the prior written consent of the Architect.

§ 1.8 Building Information Models Use and Reliance

Any use of, or reliance on, all or a portion of a building information model without agreement to protocols governing the use of, and reliance on, the information contained in the model and without having those protocols set forth in AIA Document E203™–2013, Building Information Modeling and Digital Data Exhibit, and the requisite AIA Document G202™–2013, Project Building Information Modeling Protocol Form, shall be at the using or relying party's sole risk and without liability to the other party and its contractors or consultants, the authors of, or contributors to, the building information model, and each of their agents and employees.

ARTICLE 2 OWNER

§ 2.1 General

§ 2.1.1 The Owner is the entity identified as such in the Agreement and is a Pennsylvania Public School District. Only the Board of School Directors by majority vote at a public meeting may create or increase the liability of the Owner under any contract or quasi-contract. The Board may, by affirmative vote at a public meeting, authorize an individual to approve changes in the contract sum or contract time between Board meetings under whatever terms the Board deems appropriate. On other matters, the Owner designates the Owner's Representative to provide approval or authorization on behalf of the Owner. Except as otherwise provided in Section 4.2.1, the Architect does not have such authority.

§ 2.1.2 Intentionally deleted.

(Paragraphs deleted)

§ 2.3 Information and Services Required of the Owner

§ 2.3.1 Except for permits and fees that are the responsibility of the Contractor under the Contract Documents, including 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.

§ 2.3.1.1 The Owner will secure and pay for necessary zoning approvals, site development approvals, highway access approvals, design approvals, and other approvals related to permanent facilities and required precedent to applications for permits for Work at the Project Site. **The Owner will pay directly for all Township required permits (Building, Mechanical, Electrical, Plumbing)**

§ 2.3.2 The Owner shall retain an architect 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.

§ 2.3.3 If the employment of the Architect terminates, the Owner shall employ a successor whose status under the Contract Documents shall be that of the Architect.

§ 2.3.4 The Owner will shall furnish surveys describing physical characteristics, easements, right of ways, and utility locations for the site of the Project, and a legal description of the site.

§ 2.3.5 Information or services under the Owner's control shall be furnished by the Owner with reasonable promptness after receipt from the Contractor of a written request for such information or services.

§ 2.3.6 The Contractor will be furnished, free of charge, one (1) hard copy and one (1) electronic PDF set of Contract Documents including Drawings, Project Manuals, addenda, and modifications thereof, plus additional sets as required for permits. The Contractor shall pay the actual cost of reproduction for all additional sets or individual prints requested by him. Additional sets will be furnished at the cost of reproduction, postage and handling.

§ 2.2.7 The Owner will provide for special testing and inspections not specifically indicated as by the Contractor in accordance with the requirements of Division 01 Section "Quality Requirements

§ 2.4 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.

§ 2.5 Owner's Right to Carry Out the Work

§ 2.5.1 If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents or project schedule, or fails to adequately staff the project with proper management, supervision, materials and Workforce, including its duty to proceed expeditiously with adequate forces so as to achieve substantial completion within the Contract Time, and fails within a seventy-two (72) hour period after receipt of written notice from the Owner to commence and continue correction of such default of neglect with diligence and promptness, the Owner may, without prejudice to other remedies the Owner may have, correct such deficiencies. In such case an appropriate Change Order shall be issued deducting from payments then or thereafter due to the Contractor the reasonable cost of correcting such deficiencies, including Owner's expenses, including attorney's fees and costs and compensation for the Architect's additional services made necessary by such default, neglect or failure. If payments then or thereafter due the Contractor are not sufficient to cover such amounts, the Contractor shall pay the difference to the Owner. Notwithstanding the above, Owner shall not be required to comply the notice provisions hereof, and may proceed to correct deficiencies if Contractor fails within a 24-hour period after receipt of written notice form the Owner to commence and continue correction of such deficiencies where further delay would cause substantial disruption to the project schedule. Owner shall have the further right to carry out Work without any prior notice to Contractor, in an emergency affecting safety of persons or property, and said Work is necessary to prevent threatened damage, injury or loss. Owner's right in this regard shall not relieve Contractor of its obligations and responsibilities under the Contract Documents and shall not give rise to a duty on the part of the Owner to exercise the right for the benefit of the Contractor or any other person or entity.

§ 2.6 OWNER'S REPRESENTATIVE

§ 2.6.1 The Owner has employed a qualified person or firm as Owner Representative. Owner's Representative shall have the right to attend job conferences or project meetings and to come to the Project site while the Work is in progress. Nothing herein contained shall create any contractual relationship between Owner Representative and any Contractor, Subcontractor or Sub-subcontractor. Owner's employment of an Owner Representative shall not relieve the Contractor of any of its responsibilities or obligations under the Contract Documents.

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 Contractor shall perform the Work in accordance with the Contract Documents. Where term "Contractor" is modified in any way, such as, without limit, "this Contractor", "General Construction Contractor", "Mechanical Contractor", "Plumbing Contractor", "Electrical Contractor", "separate contractor", the modified term shall be deemed to refer to the trade involved with the Work mentioned, but such meaning does not relieve the Contractor from his responsibility for all Work, whether or not such Work is sublet.

§ 3.1.3 The Contractor shall not be relieved of its obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the Architect in the Architect's administration of the Contract, or by tests, inspections or approvals required or performed by persons or entities other than the Contractor. Observation of Work by the Architect or by employees of the Architect shall not be interpreted as relieving Contractor from his responsibility for coordination of all Work, his Superintendence of the Work, and his scheduling of the Work.

§ 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 site, become generally familiar with local conditions under which the Work is to be performed, and correlated personal observations with requirements of the Contract Documents. The Contractor shall review the drawings and Work of other separate contracts to determine if that Work affects the Contractor's planned Work.

§ 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 2.3.4, shall take field measurements of any existing conditions related to that portion of the Work, and shall observe any conditions at the 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 Architect any errors, inconsistencies or omissions discovered by or made known to the Contractor as a request for information in such form as the 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.

§ 3.2.3 The Contractor is not required to ascertain that the Contract Documents are in accordance with applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, but the Contractor shall promptly report to the Architect any nonconformity discovered by or made known to the Contractor as a request for information in such form as the 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 submit 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, subject to Section 15.1.7, 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 applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities. The Contractor shall give the Architect timely notice of any additional design drawings, specifications, or instructions required to define the Work in greater detail, or to permit the proper progress of the Work. The Contractor shall not proceed with any Work not clearly and consistently defined in detail in the Contract Documents, special requests, additional drawings or instructions from the Architect. If the Contractor proceeds with such Work without obtaining further drawings or instruction, he shall correct Work incorrectly done at his own expense.

§ 3.2.5 Explorations and Reports: Reference is made to the General Requirements and Bidding Documents for identification of those reports of explorations and tests of subsurface conditions at the Project site that have been utilized by Architect in preparation of the Contract Documents. Contractor may rely upon the accuracy of the technical data contained in such reports, but not upon non-technical data, interpretations or opinions contained therein

or for the completeness thereof for Contractor's purposes. Except as indicated in the immediately preceding sentence, Contractor shall have full responsibility with respect to subsurface conditions at the Project site.

§ 3.2.6 Existing Structures: Reference is made to the Bidding Documents for identification of those drawings of physical conditions in or relating to existing surface structures which are at or contiguous to the Project site that have been utilized by Architect in preparation of the Contract Documents. Contractor may rely upon the accuracy of the technical data contained in such drawings, but not for the completeness thereof for Contractor's purposes. Except as indicated in the immediately preceding sentence and in subparagraph 3.7.4, Contractor shall have full responsibility with respect to physical conditions in or relating to such structures.

§ 3.2.7 The Owner shall be entitled to deduct from the Contract Sum amounts paid to the Architect for the Architect to evaluate and respond to the Contractor's requests for information, where such information was available to the Contractor from a careful study and comparison of the Contract Documents, field conditions, other Owner-provided information, Contractor-prepared coordination drawings, or prior Project correspondence or documentation.

§ 3.2.8 The Contractor shall be liable to the Owner for damages resulting from errors, inconsistencies or omissions in the Contract Documents or from differences between field measurements or conditions and the Contract Documents, if (1) the Contractor knowingly fails to report such error, inconsistency, omission or difference to the Architect, or the Contractor fails to carefully study and compare the Contract Documents relative to that portion of the Work for which the Contractor is responsible, such that, had Contractor done so, Contractor would have discovered such error, inconsistency or omission and reported same to Architect and (2) the damages would not have been suffered but for the Contractor's failure.

§ 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. If the Contract Documents give specific instructions concerning construction means, methods, techniques, sequences, or procedures, the Contractor shall evaluate the jobsite safety thereof and shall be 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 and Architect, and shall propose alternative means, methods, techniques, sequences, or procedures. The Architect shall evaluate the proposed alternative solely for conformance with the design intent for the completed construction. Unless the Architect objects to the Contractor's proposed alternative, the Contractor shall perform the Work using its alternative 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 and their agents and employees, and other persons or entities performing portions of the Work for, or on behalf of, the Contractor or any of its Subcontractors or claiming by, through or under Contractor and for any damages, losses, costs and expenses resulting from such acts or omissions. If any failure by Contractor to comply with the Contract Documents or to maintain an approved Project Schedule causes any damage or costs to Owner, then Contractor shall indemnify and hold harmless Owner for any such damage or costs. Such damage or cost to Owner shall include any payment by Owner to others, or liability of Owner to others resulting from such failure by Contractor, including but not limited to (1) any payment for liability arising from Change Orders, Claims, arbitration, or litigation, or (2) any payment or liability for fees or costs to Owner's Representative, Architect, consultants, experts and attorneys..

§ 3.3.3 The Contractor shall be responsible for inspection of portions of Work already performed to determine that such portions are in proper condition to receive subsequent Work. In the event any of the Work is required to be inspected or approved by any governmental authority having jurisdiction, Contractor shall cause such inspection or approval to be scheduled and performed. No inspection performed or failed to be performed shall release Contractor from its obligations to have such Work inspected nor shall it be construed as an approval or acceptance of the Work or any part thereof.

§ 3.3.4 Contractor's supervision of Work shall include expediting and coordination of Work of trades. Contractor shall perform all supervising and procuring required to insure delivery of materials to maintain Work schedules of

Subcontractors and progress schedule of project to insure full completion of Work, to supply equipment or instruments necessary to complete specified test, checks, balancing of system, to furnish operating instructions, etc.

§ 3.3.5 The Contractor, his employees or his Subcontractors shall not install any product or equipment in a manner which is in direct conflict with the manufacturer's recommended requirements. If the manufacturer of the product or equipment has requirements which cannot be met by the specific application indicated, the Contractor shall bring this information to the attention of the Architect. Products or equipment installed contrary to their manufacturer's requirements shall be replaced at no additional cost to the Owner unless specifically authorized in writing by the Architect.

§ 3.3.6 When complex mechanical and electrical installations are involved, Contractor's representatives shall be sufficiently familiar with these trades to provide intelligent and efficient supervision through all phases of Work.

§ 3.3.7 The General Contractor is designated as the Project Coordinator for this Project. The Project Coordinator and other Contractors are responsible for coordination of the Work. The Project Coordinator is responsible for making all coordination decisions not mutually agreed to by all affected Contractors. Disputes between or among the Project Coordinator and one or more other Contractors and disputes in connection with the construction schedule, the furnishing of additional resources to meet the project schedule, job coordination and all aspects of the means and methods of construction shall be submitted promptly to the Project Coordinator for a final construction decision. The Project Coordinator and the affected Contractor or Contractors shall in connection with all submissions for a final construction decision provide actual written notice contemporaneously to the Owner's Representative and the Architect. The final construction decision of the Project Coordinator must, at all times, be consistent with content and intent of the Contract Documents and the latest accepted schedule. The final construction decision of the Project Coordinator will be observed, accepted and fully followed by all Contractors and their Subcontractors on the project, subject only to commencement of litigation proceedings between Project Coordinator and separate Contractor(s). The progress of the Work in accordance with the final construction decision of the Project Coordinator shall not be delayed pending any such litigation proceedings. The Contractors, including Project Coordinator, shall have no right of action against the Owner, the Owner's Representative or Architect in connection with such suits, and shall not join Owner, Owner Representative or Architect in any such suits. To the extent necessary to effectuate the terms and conditions of this subparagraph, the separate contractors are granted third party beneficiary status to this Contract between Owner and Contractor.

§ 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.

§ 3.4.2 Refer to Division 1, Section "Substitutions", for additional requirements regarding substitutions. **§ 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.

(Paragraph deleted)

§ 3.4.4 The Contractor shall supply the Owner with state and federal criminal history reports pursuant to 24 P.S. §1-111, Pennsylvania Child Abuse History Clearances, and signed PDE-6004 disclosure forms for all employees, agents and Subcontractors and their employees and agents who will be on the Owner's property, prior to such individuals being permitted on the Owner's property. Original clearances must be presented to the Owner prior to each employee, agent or Subcontractor coming on the Owner's property. All documents shall be dated no earlier than one year prior to date of presentation to the Owner. The Owner shall retain copy of all such documents in its file.

§ 3.4.1.1 Owner reserves the right to reject any person Owner deems unfit to be permitted on school grounds and in proximity to students. Upon written notice from Owner, Contractor shall have all such persons removed from the Project. Owner's right to declare such person unfit shall not be limited to the required exclusion of persons from school property as set forth in Section 1-111 of the Pennsylvania Public School Code and/or Subchapter C.2 of the Child Protective Services Law.

§ 3.4.1.2 The Owner will issue identification badges to individuals upon the Owner's satisfactory review of the individual's state and federal criminal history reports, child abuse clearance, and signed PDE-6004 disclosure form. All individuals working on site must have an Owner-issued identification badges before entering the site.

§3.4.1.3 The Contractor shall notify the Superintendent in writing within 72 hours if any person working on the Project under the Contractor's supervision (employee, agent, Subcontractor, Subcontractor's employee, etc.) is arrested or convicted of offense listed in 24 P.S. §1-111.

§3.4.5 Standards of quality for the Work is established by description, by reference to trade name, manufacturer's names or by catalog model or figure numbers.

§ 3.4.5.1 Such references require that which is established as standards of quality shall be provided without substitution unless permitted by the Contract Documents.

§ 3.4.5.2 Work specified which becomes unavailable due to strike, loss of plant through fire or flood, bankruptcy, or other unforeseeable cause, shall be substituted equally from another source subject to substitution procedures in the Contract Documents.

§ 3.4.5.2.1 Work covered by paragraph 3.4.5.2 shall not automatically entitle the Contractor to either an increase in Contract Sum or Contract Time. Notwithstanding the same, if the Work covered by 3.4.5.2 results in a savings to Contractor, Owner shall be entitled to a reduction in the Contract Sum. In any event, Work covered by paragraph 3.4.5.2 shall be incorporated into the Project through a properly executed Change Order.

§ 3.4.5.2.2 Items not ordered by the Contractor in a timely manner for incorporation into the Work will not be considered for claims by the Contractor for additional time or costs.

§ 3.4.5.3 Substitute Work offered and approved shall not be a basis for contingent extra charges or additional charges due to changes in related Work, such as rough-in, changes in supporting foundations, and other related Work. The cost of changes in Work by other contracts as a result of substitute Work of this Contract shall be the responsibility of this Contractor and will be deducted by Change Order.

§ 3.4.5.4 The Contractor shall assume full responsibility for substitute Work.

§ 3.4.5.5 The Owner shall be entitled to deduct from the Contract Sum amounts paid to the Architect to evaluate the Contractor's proposed substitutions and to make agreed-upon changes in the Drawings and Specifications made necessary by the Owner's acceptance of such substitutions.

§ 3.4.6 Whether indicated or not, all products included in the Work shall be asbestos-free and lead-free. If any suspected asbestos-containing or lead-containing materials are installed, the Owner has the right to have the material in question tested and if proven to contain asbestos or lead exceeding the amounts permitted by law, the Contractor shall remove all material in question and replace it with acceptable material at no additional cost to the Owner.

§ 3.4.7 The Contractor must comply with the Public Works Employment Verification Act (the "Act"), including, but not limited to the following:

- .1 The Contractor and every Subcontractor performing work under the Contract shall utilize the E-Verify Program (EVP) operated by the United States Department of Homeland Security to electronically verify employment eligibility of each new employee hired after January 1, 2013.
- .2 The Contractor, as precondition of the Contract, shall submit the Public Works Employment Verification Form to the District along with its Payment Bond, Performance Bond, Certificates of Insurance and Form Contract.
- .3 Every Subcontractor shall submit completed Public Works Employment Verification Form to the District prior to performing work on the Project.

- .4 During term of the Contract, each new employee hired by the Contractor, regardless of whether employee will be working onsite or offsite of the Project, shall be verified within 5 business days of his or her start date.
- .5 During the Project, new employee hired by Subcontractor, regardless of whether employee will be working onsite or offsite of Public Work or otherwise, shall be verified within 5 business days of his or her start date.
- .6 Subcontracts between the Contractor and its Subcontractors and between Subcontractors of any tier and their Subcontractors are required to contain notification of applicability of the Act, information regarding use of the EVP, and reference to the Department's web site at www.dgs.state.pa.us to obtain copy of the Form.
- .7 The Contractor and all Subcontractors shall cooperate with the Department during investigation or audit arising under the Act.
- .8 The Contractor and every Subcontractor shall maintain documentation of continued compliance with the Act by utilizing the EVP for new employees hired throughout duration of the Public Work Contract.

§ 3.5 Warranty

§ 3.5.1 The Contractor warrants to the Owner 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 to the requirements of the Contract Documents and will be free from defects. Work, materials, or equipment not conforming to these requirements will be considered defective, unless the Owner issues a written acceptance specifically identifying the non-conformity. 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 Architect, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

§ 3.5.2 All material, equipment, or other special warranties required by the Contract Documents shall be issued in the name of the Owner, or shall be transferable to the Owner, and shall commence in accordance with Section 9.8.4. The minimum Warranty period, as defined above shall be one (1) year from date of Substantial Completion of the Project. The warranty provided in subparagraph 3.5.1 shall be in addition to and not in limitation of any other warranty required by the Contract Documents or otherwise prescribed by law.

§ 3.6 Taxes

§ 3.6.1 The Contractor shall pay sales, consumer, use and similar taxes for the Work or portions thereof provided by the Contractor and shall comply with the following:

§ 3.6.1.1 Contractor shall be responsible for and shall pay all applicable sales, use, excise or other taxes required by law on all materials, tools, apparatus, equipment, fixtures, services, incidentals or otherwise which may be purchased or used in connection with the Work or portions thereof. The Contract Sum shall include all applicable taxes. Notwithstanding the foregoing, however, Owner is exempt (excluded) from sales and/or use tax in Pennsylvania on certain transactions. Contractor and all Subcontractors shall purchase as exempt (excluded) from Pennsylvania sales and/or use tax all tangible personal property within the definition of 'building machinery and equipment' as that term is defined in Act No. 45-1998 (72 P.S. § 7201 et seq.). Refer to Instructions to Bidders for additional information regarding the definition of "building machinery and equipment." No charges for taxes shall be allowed for such exempt items. It shall be the Contractor's responsibility to determine those items for which an exemption will apply, and the Contractor shall obtain legal or other tax advice to determine how and to what extent an exemption from the taxes apply. In order to facilitate such purchase free of sales and/or use tax in Pennsylvania, and upon certification by Contractor that an item is, in fact, tax exempt, the Owner agrees to execute a tax exemption certificate certification prepared by Contractor or a Subcontractor as may be required by the regulations of the Pennsylvania Department of Revenue.

§ 3.6.1.2 Assignment of Refund Rights.

- .1 Owner shall be entitled to claim refunds of sales and/or use tax paid on these and other purchases of tangible personal property required in connection with the Work. The Contractor and all Subcontractors hereby assign to Owner all rights to any such refund claim and to any resulting refund and hereby appoint the Owner as their Attorney-in-Fact to execute and acknowledge in their respective names and to prosecute such refund claims before administrative agencies and courts in Pennsylvania having jurisdiction over such claims. The Owner or its agent shall have the right to review the books and records of the Contractor and all Subcontractors for the purpose of documenting and substantiating any such refund claim. Contractor and all Subcontractors shall cooperate fully with Owner in pursuing any such refund claim and shall make available to the Owner any applicable documents.

§ 3.6.1.3 Access to Accounting Records.

- .1 The Contractor shall check all materials, equipment and labor entering into the Work, and shall keep such full and detailed accounts as may be necessary for proper financial management under the Contract and the system shall be satisfactory to Owner. The Owner or its representative shall be afforded access to, including the right to photocopy, all the Contractor's records, books, correspondence, instructions, drawings, receipts, vouchers, memoranda, and similar data relating to the Work, and the Contractor shall preserve all such records for a period of three (3) years, or for such longer period as may be required by the law, after receipt of final payment.

§ 3.6.1.4 Contracts with Subcontractors.

- .1 The Contractor agrees to include the "Access to Accounting Records" and "Assignment of Refund Rights" paragraphs, in full, in any contracts with Subcontractors. The Contractor further agrees that it will not file a claim for refund for any sales and/or use tax which is the subject of the assignment in Subparagraph 3.6.1.2 above. Contractor shall obtain from all Subcontractors similar agreements that they will not file claims for refund for any sales and/or use tax which is the subject of the assignment in Subparagraph 3.6.1.2 above.

§ 3.7 Permits, Fees, Notices and Compliance with Laws

§ 3.7.1 The Architect on the Owners behalf will submit the project drawings for Township Code review to facilitate procurement of the Building Permit. Owner shall pay Township directly for Building Permit. Contractor shall complete all necessary Township formwork and formally apply for and obtain the Building Permit. Except as set forth in this paragraph and in subparagraph 2.3.1.1, Contractor shall secure and pay for all other permits, governmental fees, licenses and inspections necessary for the proper execution and completion of the Work. The contractors shall secure and pay for all necessary administrative costs, insurance, business privilege licenses, certifications, or taxes to apply for the necessary required to perform the Work.'

§ 3.7.1.1 To the extent Contractor pays any permits, fees, including connection and/or tap-in fees not otherwise properly due, the Owner shall be entitled to any refund relating thereto and the Contractor agrees to assign any and all rights to said refund or refund claim to Owner. The Contractor and all Subcontractors hereby assign to Owner all rights to claim any such refund claim and to any resulting refund and hereby appoint the Owner as their Attorney-in-Fact to execute and acknowledge in their respective names and to prosecute such refund claims before administrative agencies and courts in Pennsylvania having jurisdiction over such claims. The Owner or its agent shall have the right to review the books and records of Contractor and all Subcontractors for the purpose of documenting and substantiating any such refund claim. Contractor and all Subcontractors shall cooperate fully with Owner in pursuing any such refund claim and shall make available to Owner any applicable documents.

§ 3.7.2 The Contractor shall comply with and give notices required by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities applicable to performance of the Work including any work hour or parking restrictions imposed by Haverford Township

§ 3.7.3 If the Contractor performs Work contrary to applicable 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 site that are (1) concealed physical conditions (other than subsurface conditions, which are addressed in 3.2.5) that differ materially from those indicated in the Contract Documents or (2)

unknown physical conditions of an unusual nature (other than subsurface conditions, which are addressed in 3.2.5) 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 notice to the Owner and the Architect before conditions are disturbed and in no event later than 10 days after first observance of the conditions. The Architect will promptly investigate such conditions and, if the Architect 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 that an equitable adjustment be made in the Contract Sum or Contract Time, or both. If the Architect determines that the conditions at the 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 and Contractor, stating the reasons. If the Contractor disputes the Architect's determination or recommendation, then the Contractor may submit a Claim as provided in Article 15.

§ 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 the Owner 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 provided in Article 15.

§ 3.8 Allowances

§ 3.8.1 The Contractor shall include in the Contract Sum all allowances set forth in the Unit Price Specification Section 01200 .

§ 3.8.2

(Paragraphs deleted)

Project allowances shall be limited those set forth in the Unit Price Specification Section 01200 Quantities indicated as allowances in the Unit Price Specification are in excess of quantities required to complete the Work as indicated on the Drawings and Specifications and the fee for such Quantity Allowances shall be included in the Base Bid. If Contractor determines that it must use a Quantity Allowance, then it must notify the Owner in advance and allow the Owner to independently confirm the necessity and quantity of allowance used. Any unused Quantity Allowance shall be credited to the Owner through a deduct change order upon completion of the Work.

§ 3.8.3 No cash allowances are permitted on this Project.

§ 3.9 Superintendent

§ 3.9.1 The Contractor shall employ a competent Superintendent and necessary assistants who shall be in regular attendance at the Project site full time during the progress of the Work until the day of Substantial Completion, and for such additional time thereafter as the Architect may determine to be necessary for the expeditious completion 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. Important communications shall be confirmed in writing. Other communications shall be similarly confirmed on written request in each case.

§ 3.9.2 Within 14 days of receipt of the information, the Architect may notify the Contractor, stating whether the Owner or the Architect (1) has reasonable objection to the proposed superintendent or (2) requires additional time for review. Failure of the Architect to provide notice within the 14-day period shall constitute notice of no reasonable objection. The Project Superintendent must be approved by the Owner and Architect prior to the start of Work. Within ten (10) days following receipt of Notice to Proceed, the Contractor shall submit a resume of the proposed Superintendent who will be on site full time. The resume shall include at least three (3) recent projects of similar contract scope with the names and telephone numbers of Owner and Architect representatives for each project. The Superintendent shall be on site full time and shall not be changed except with the consent of the Owner and Architect, unless the Superintendent proves to be unsatisfactory to the Contractor and ceases to be in his employ. In any event, a replacement Superintendent shall be subject to the approval of the Owner and Architect.

§ 3.9.3 The Contractor shall not employ a proposed superintendent to whom the Owner or Architect has made reasonable and timely objection. The Contractor shall not change the superintendent without the Owner's consent, which shall not unreasonably be withheld or delayed. If during the course of the Project, it is evident that the Superintendent is not competent or is not managing the progress of the Work or is not coordinating the various trades

under the Contractor's supervision, then the Owner Representative will document such findings to the Contractor. If within ten (10) days of receiving such notice, no substantial effort or correction of the findings is made, then the Owner, based upon the Owner Representative request, may require the replacement of the Superintendent with an acceptable Superintendent.

§ 3.9.4 The Contractor may not substitute another job superintendent without prior consent of the Owner. Each Contractor shall maintain a full time qualified Project Superintendent on site at all times.

§ 3.10 Contractor's Construction and Submittal Schedules

§ 3.10.1 Within eight (8) days of the issuance of the Notice to Proceed, the Project Coordinator shall submit for the Owner Representative's Owner's and Architect's information and for the other Contractors' review, consideration, and comment, a preliminary draft of a Construction Schedule. Within five (5) days of the Project Coordinator's issuance of the preliminary draft Construction Schedule, each Contractor will review the preliminary draft Construction Schedule and provide comments, including detailed work items, sequencing, durations, and such other relevant information regarding the Contractor's work in each area of the Project as required by the Project Coordinator for preparing a final construction Schedule to the Project Coordinator, the other Contractors, the Owner's Representative, and the Architect. Following submission of that information, a Prescheduling Conference will be held in accordance with the Contract Documents. Within five (5) days of receiving the comments from the other Contractors, the Contractors will hold the Preconstruction Scheduling Conference. Within five (5) days of the Preconstruction Scheduling Conference, the Project Coordinator will prepare a Construction Schedule incorporating the separate Contractors' items of Work, sequencing, and durations and issue the Construction Schedule to the other Contractors with copies to the Owner's Representative and Architect. Each Contractor shall have five (5) days to review and comment on or approve the Construction Schedule. Following approval by all Contractors, the Owner shall review the Construction Schedule and either provide comments within five (5) days or approve the Construction Schedule. Upon written approval of the Construction schedule by each Contractor and the Owner, the Construction Schedule shall with respect to time, become of the essence of the Contract in regard to Contractor's performance of the Work and any Contractor who does not comply with the schedule may be held in violation of Article 8, Paragraph 8.2, Progress and Completion. The Construction Schedule may be changed or revised only with the written consent of all Contractors and the Owner. **Due to the overall schedule constraints and that the substantial completion date cannot be missed, Contractors should assume 6-day work weeks as required to meet the Milestone Dates within and project. All Saturday required work should be specifically listed in each Contractor's schedule comments. In addition, during the school year the contractors can work on off hours and a second shift as needed to stay on schedule and get work completed. Any off-hour work should be noted in the schedule.**

The term "Milestone Date" shall mean the dates set forth for commencement or completion of various milestones intended to keep the overall project on schedule. **The Milestone Dates are identified on the PH drawings of the Contract documents** as well as in the specifications

§ 3.10.2 Each Contractor, promptly after being awarded the Contract and thereafter as necessary to maintain a current submittal schedule, shall submit a submittal schedule for the Architect's approval. The Architect's approval shall not be unreasonably delayed or withheld. The submittal schedule shall (1) be coordinated with the Construction Schedule, and (2) allow the Architect reasonable time to review submittals. If the Contractor fails to submit a submittal schedule, or fails to provide submittals in accordance with the approved 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 Contractors shall perform the Work in general accordance with the most recent approved Construction Schedule.

§ 3.10.4 All schedule and Work items must be in conformance with the Construction Schedule requirements listed in the project manual specification section 013200 including any phasing and the milestones provided in the PH Contract drawings

§ 3.10.5 All Contractors shall be responsible to perform Work to ensure that the Project is completed by the Project Contract Completion Date and any Milestone Dates established in the Contract Documents are met. Any claims for additional costs associated with completion of the Work within the required Contract time frames will not be considered unless the Owner actively interferes with the Contractor's performance of the Work and such interference

causes a delay in the Construction Schedule. Contractors, who feel extra time, in any form such as shift Work, overtime, and premium time, is necessary to meet Contract requirements regardless of trade, should include these costs in their bids. Contractors must recognize that although their Work might not require shift, overtime, or premium time Work for completion within the stipulated time frame, it may be required in order to allow other Contractors to complete within the time frame. Contractors must allow for these overtime requirements and include the costs necessary to allow the other Contractors to complete within the specified time. Failure to recognize the extra costs in his bid shall not relieve the Contractor from utilizing shift, overtime, or premium time Work in performance of his Contract. All costs associated with meeting the timeframes indicated in the construction schedules shall be included in the Contract Sum.

§ 3.10.6 Preparation, review and updating of the Construction Schedule shall not result in liability on the part of Owner or Owner's representative, in favor of Contractor for time, cost overruns or schedule changes which are required to maintain project Substantial Completion date and all Milestone Dates established in the Contract Documents.

§ 3.10.7 GENERAL SCHEDULING REQUIREMENTS

§ 3.10.7.1 The Work under the Contract Documents shall be planned, scheduled, executed, reported and accomplished using sequential and logical activities, in calendar days. The provisions of the General Requirements and the directions of the Project Coordinator are to be followed by all Contractors in scheduling his construction activities. The scheduling services of the Project Coordinator are part of its Contract with the Owner, but nothing herein relieves the obligations of the Contractor and other Contractors to schedule their own construction activities and nothing herein alters the obligation of the Project Coordinator to resolve all supervision, coordination and scheduling issues between and amongst the Contractors.

§ 3.10.7.2 Each Contractor is responsible for determining the sequence and logic of activities, the time estimates of the detailed construction activities and the means, methods, techniques and procedures to be employed with regard to his portion of the Work and for providing that information to the Project Coordinator. The approved Construction Schedule shall represent each Contractor's best judgment of how its Work will progress in compliance with the requirements of the Contract Documents. Each Contractor shall ensure that the Construction Schedule (a) incorporates the Contractor's work including sequences and durations, (b) is current and accurate and (c) is properly and timely monitored, updated and revised as Project conditions and the Contract Documents may require, and as may be directed by Project Coordinator. Each Contractor shall notify the Project Coordinator and the Owner's representative in writing if it determines that the Construction Schedule does not adequately incorporate its Work, sequences, or durations, or requires revision or updating.

§ 3.10.7.3 Each Contractor shall consult with his major Subcontractors relating to his review of the draft Construction Schedule prepared by the Project Coordinator. Major Subcontractors shall receive copies of those portions of Construction Schedule which relate to their Work and shall be continually advised of any updates or revisions to the Construction Schedule as the Work progresses. When Contractor submits his review and comment on the Construction Schedule to the Project Coordinator or makes any proposed updates or revisions to such Schedule, it shall be concluded by Owner and Project Coordinator that Contractor has consulted with and has the concurrence of his major Subcontractors. Each Contractor shall be solely responsible for ensuring that its Subcontractors comply with the requirements of the Construction Schedule for their portions of the Work.

§ 3.10.7.4 Each Contractor shall provide all data as required by Project Coordinator relating to activities, durations and sequences as part of Contractor's review and comment upon the initial draft Construction Schedule or any proposed revision or update thereof. This data shall reflect Contractor's actual plan for construction for the Project, and shall fully comply with all requirements of the Contract Documents.

§ 3.10.7.5 Contractor agrees that the pre-construction scheduling conference, the provision of drafting and computerization services by the Project Coordinator, and the reasonable exercise of any rights under this Paragraph by Owner shall not be grounds for any claim against Owner or Owner Representative or any representative of the Owner by Contractor or any of his Subcontractors or Sub-Subcontractors, alleging interference, lack of cooperation, delay, disruption, harassment, negligence or hindrance by Owner, Owner Representative or Project Coordinator and Contractor covenants not to sue therefore. This provision shall not relieve Project Coordinator from any liability otherwise arising under Subparagraph 6.2.3.

§ 3.10.7.6 Each Contractor acknowledges and agrees that his portion of the Work and planned activities must be flexible in order to accommodate and allow for his coordination with the construction activities of the other Contractors and the incorporation of those activities in the Construction Schedule, and Contractor agrees to mutually cooperate with the other Contractors in this regard.

§ 3.10.7.7 The review by Owner, Architect or Project Coordinator of the Contractor's comments to the draft Construction Schedule or any proposed update or revision thereof does not constitute an agreement by Owner, Owner Representative, Architect or Project Coordinator of any start or finish date in the schedule or specific durations or sequences for activities of the Contractor; further, nothing herein shall be construed as modifying or changing, or excusing the performance of Contractor of required portions of the Work by the Completion Dates and Milestone Dates as set forth in the Contract Documents.

§ 3.10.7.8 The Completion Dates and Milestone Dates set forth in the Contract Documents represent only the major items of Work and may include interface dates with the construction activities of the other Contractors or others. Completion Dates and Milestone Dates are Contract requirements and are of the essence to the Contract Documents and to the coordination of the Work by Contractor. Completion Dates and Milestone Dates represent the latest allowable completion time for those portions of the Work to which each Completion Date or Milestone Date relates. The Completion Dates and Milestone Dates are not intended to be a complete listing of all Work under the Contract Documents or of all interfaces with Work performed by other Contractors or others. Contractor shall determine the time requirements for all such interfaces and shall be responsible for planning, scheduling and coordinating the Work in order to complete in accordance with those requirements.

§ 3.10.7.9 Review by the Project Coordinator of Contractor's review and comment on the draft Construction Schedule or any proposed revisions or updates thereto, are advisory only and shall not relieve Contractor of the responsibility for accomplishing each portion of the Work within each and every applicable Completion Date and each and every Milestone Date. If a Contractor commits an error in the preparation of or omits an element of the Work from its comments on the draft Construction Schedule or any update thereof and the omission and/or error is incorporated into the approved or accepted Construction Schedule, or any revisions or updates, the Contractor committing the error or omissions shall not be excused from performing the Work in compliance with the Contract Documents and shall be responsible to the other Contractors and the Owner for any additional costs or damages incurred as a result of the error or omission. Review by the Project Coordinator does not make Owner, Project Coordinator or Architect liable to Contractor for time or cost overruns flowing from such omissions or errors. This provision shall not relieve Project Coordinator from any liability otherwise arising under Subparagraph 6.2.3.

§ 3.10.8 UPDATING OF CONSTRUCTION SCHEDULE / PROGRESS REPORTS

§ 3.10.8.1 At a minimum of one time per month or as requested by Owner or in accordance with the dates specified in the Contract Documents or established by the Project Coordinator, the Project Coordinator shall update the Construction Schedule. Each Contractor shall arrange for his Superintendent to meet at the Project site with the Project Coordinator to review Contractor's report of actual progress. Said report shall set forth up-to-date and accurate progress data, shall be based upon Contractor's best judgment and shall be prepared by Contractor in consultation with all Subcontractors.

§ 3.10.8.2 The progress report of each Contractor shall show the Work activities, or portions of activities, completed during the reporting period, the actual start and finish dates for these activities, remaining durations and/or estimated dates for completion of Work for activities currently in progress.

§ 3.10.8.3 Project Coordinator shall produce an update Work sheet for Contractor to complete as a part of this process.

§ 3.10.8.4 Contractor shall submit a written report with the updated progress analysis which shall include, but not be limited to, a description of problem areas, current and anticipated delaying factors and their impact, explanations of corrective actions taken or planned, any newly planned activities or changes in sequence, and proposed logic for a recovery schedule, if required, as further described herein. The report shall also include:

- (1) a narrative describing actual Work accomplished during the reporting period;
- (2) a list of major construction equipment used on the Project during the reporting period and any construction equipment idle during the reporting period;
- (3) the total number of personnel by craft actually engaged in the Work during the reporting period, with such total stated separately as to office, supervisory, and field personnel;

- (4) a manpower and equipment forecast for the succeeding thirty (30) days, stating such total as to office, supervisory and field personnel;
- (5) a list of Contractor-supplied materials and equipment, indicating current availability and anticipated Project site delivery dates; and
- (6) changes or additions to Contractor's supervisory personnel, if any, since the preceding progress report.

§ 3.10.8.5 Application for Payment: Except as provided in Subparagraph 3.10.9, Contractor understands and agrees that the submission and acceptance of progress updates and the receipt of progress reports are an integral part and basic element of the Applications for Payment; and that Contractor shall not be entitled to any progress payment under the Contract Documents until Contractor has fully complied with the requirements of this Paragraph 3.10.

§ 3.10.8.6 Contractor shall be solely responsible for expediting the delivery of all materials and equipment to be furnished by or to him so that the progress of construction shall be maintained according to the currently accepted Construction Schedule for the Work. Contractor shall notify Project Coordinator in writing, and in a timely and reasonable manner, whenever Contractor determines or anticipates that the delivery date of any material or equipment to be furnished by Contractor shall be later than the delivery date indicated by the Construction Schedule, or required consistent with the completion requirements of the Contract Documents, subject to schedule updates as herein provided.

§ 3.10.8.7 Contractor shall ensure that off the site work activities do not adversely affect progress in accordance with the Construction Schedule.

§ 3.10.9 Initial Progress Payment. The completed Construction Schedule, including the Schedule of Values, shall be required for each Application for Payment. However, one initial provisional progress payment may be payable in the discretion of Owner Representative if it determines Contractor is complying with this Paragraph 3.10 during the development of the Construction Schedule and Schedule of Values as required herein. However, no more than one Application for Payment shall be approved until all of the requirements of this Paragraph 3.10 have been met.

§ 3.10.10 RECOVERY SCHEDULE

§ 3.10.10.1 Should the updated Construction Schedule, at any time during Contractor's performance, show that Contractor is five (5) or more days behind schedule for any Completion Date or milestone date, or if Contractor's actual performance fails to meet a Milestone Date or Completion Date, Contractor shall prepare a recovery schedule at no cost to Owner (unless the delay was directly caused by the Owner's active interference with the Work) explaining and displaying how Contractor intends to reschedule his Work in order to regain compliance with the Construction Schedule during the immediate subsequent pay period.

§ 3.10.10.2 If Contractor believes that all of the time can be recovered during the subsequent pay period, Contractor shall be permitted to prepare a recovery schedule as set forth below. However, if Contractor believes it shall take more than thirty (30) days to recover all of the lost time, he shall prepare and submit a request for revision to the Construction Schedule and comply with all of the requirements of a schedule revision as set forth in this Subparagraph 3.10.10 and Subparagraph 3.10.11.

§ 3.10.10.3 Contractor shall prepare and submit to the Project Coordinator a limited duration recovery schedule, incorporating best available information from Subcontractors and others which shall permit return to Construction Schedule at the earliest possible time. Contractor shall prepare a recovery schedule to the same level of detail as the Construction Schedule for a maximum duration of one month. The recovery schedule shall be prepared in coordination with other Contractors.

§ 3.10.10.4 Within two (2) days after submission by the Contractor of a recovery schedule to Project Coordinator, Contractor and the Project Coordinator shall participate in a conference to review and evaluate the recovery schedule. Within two (2) days of the conference, Contractor shall submit the revisions necessitated by the review for Project Coordinator review and acceptance. Contractor shall use the accepted recovery schedule as his plan for returning to the Construction Schedule.

§ 3.10.10.5 Each Contractor shall confer continuously with the Project Coordinator to assess the effectiveness of the recovery schedule. As a result of this conference:

§ 3.10.10.5.1 If Project Coordinator determines Contractor is still behind schedule, Project Coordinator shall direct Contractor to prepare a schedule revision with the assistance of the Project Coordinator and comply with all of the requirements of a schedule revision as stated herein and the other requirements of the Contract Documents; provided, however, that nothing herein shall limit in any way the rights and remedies of Owner and Project Coordinator as provided elsewhere in the Contract Documents; or

§ 3.10.10.5.2 If Project Coordinator determines Contractor has successfully complied with provisions of the recovery schedule, Project Coordinator shall direct Contractor to return to the use of the accepted Construction Schedule.

§ 3.10.10.6 Nothing herein alters the obligation of Project Coordinator to resolve coordination and scheduling issues in dispute between and amongst Contractors.

§ 3.10.11 SCHEDULE REVISIONS

§ 3.10.11.1 Should Contractor desire to or be otherwise required under the Contract Documents to make modifications or changes in his method of operation, his sequence of Work or the durations of the Work activities in the Construction Schedule, he shall do so in accordance with the requirements of this Paragraph, Division 01 Section "Construction Progress Documentation", and schedules. Proposed revisions to the accepted Construction Schedule must be presented to and reviewed by the Project Coordinator.

§ 3.10.11.2 Contractor shall submit requests for revisions to the Construction Schedule to the Project Coordinator, together with written rationale for revisions and description of logic for rescheduling Work and maintaining the dates for Substantial and Final Completion listed in the Contract Documents. Proposed revisions acceptable shall be incorporated into next update of the Construction Schedule. Separate contractors shall pay Owner for costs incurred by Project Coordinator for preparing the revised schedule.

§ 3.10.11.3 In all instances where a revision to the Construction Schedule will affect the construction activities of other Contractors, prior to the submission by Contractor of his proposed schedule revisions, he shall meet with and gain written acceptance of the Contractors to make the revisions which shall be evidenced by the signatures of said Contractors on the proposed schedule revisions. If accepted, the revisions, shall be binding upon Contractor and all separate Contractors on the Project.

§3.10.11.4 All proposed revisions to the Construction Schedule are subject to the Owner's review and approval.

§ 3.11 Documents and Samples at the Site

The Contractor shall make available, at the Project site, the Contract Documents, including Change Orders, Construction Change Directives, and other Modifications, in good order and marked currently to indicate field changes and selections made during construction, and the approved Shop Drawings, Product Data, Samples, and similar required submittals. These shall be in electronic form or paper copy, available to the Architect and Owner, and delivered to the Architect for submittal to the Owner upon completion of the Work as a record of the Work as constructed.

§ 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.

§ 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 how 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 is subject to the limitations of Section 4.2.7. Informational submittals upon which the Architect is 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 Architect without action.

§ 3.12.5 The Contractor shall review for compliance with the Contract Documents, approve, and submit to the Architect, Shop Drawings, Product Data, Samples, and similar submittals required by the Contract Documents, in accordance with the submittal schedule approved by the Architect or, in the absence of an approved submittal schedule, with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of the Owner or of Separate Contractors.

§3.12.5.1 Unless otherwise set forth in the approved construction schedule or Contract Documents, the Contractor is to submit shop drawings as set forth in the project Milestones, and to work to achieve final review of shop drawings as set forth in the project Milestones

§ 3.12.6 By submitting Shop Drawings, Product Data, Samples, and similar submittals, the Contractor represents to the Owner 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.

§ 3.12.7 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 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 the requirements of the Contract Documents by the Architect's approval of Shop Drawings, Product Data, Samples, or similar submittals, unless the Contractor has specifically notified the Architect 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.

§ 3.12.9 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 Architect on previous submittals. In the absence of such 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.

§ 3.12.10.1 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 be entitled to rely upon the adequacy and accuracy of the performance and design criteria provided in the Contract Documents. The Contractor shall cause such services or certifications to be provided by an appropriately 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 and accuracy of the services, certifications, and approvals performed or provided by such design professionals, provided the Owner and Architect have specified to the Contractor the performance and design criteria that such services must satisfy. Pursuant to this Section 3.12.10, the Architect will review and 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.

§ 3.12.10.2 If the Contract Documents require the Contractor's design professional to certify that the Work has been performed in accordance with the design criteria, the Contractor shall furnish such certifications to the Architect at the time and in the form specified by the Architect.

§ 3.12.11 The Architect's review of Contractor's submittals will be limited to examination of an initial submittal and two (2) resubmittals. The Owner is entitled to obtain reimbursement from the Contractor for amounts paid to the Architect for evaluation of additional resubmittals.

§ 3.13 Use of Site

The Contractor shall confine operations at the site to areas permitted by applicable laws, statutes, ordinances, codes, rules and regulations, lawful orders of public authorities, and the Contract Documents and shall not unreasonably encumber the site with materials or equipment.

3.13.1 Control or Reference Points: Immediately upon occupancy of the Project site for the purpose of commencement of the Work, Contractor shall locate, including but not limited to, all general control or reference points, benchmarks, etc., and take such action as may be necessary to prevent damage or destruction of such points. In the event Contractor fails to do so, Contractor shall be liable for all such costs necessary to re-establish such control or reference points.

§ 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, or patching shall be restored to the condition existing prior to the cutting, fitting, or patching, unless otherwise required by the Contract Documents.

§ 3.14.2 The Contractor shall not damage or endanger a portion of the Work or fully or partially completed construction of the Owner or Separate Contractors by cutting, patching, or otherwise altering such construction, or by excavation. The Contractor shall not cut or otherwise alter construction by the Owner or a Separate Contractor except with written consent of the Owner and of the Separate Contractor. Consent shall not be unreasonably withheld. The Contractor shall not unreasonably withhold, from the Owner or a Separate Contractor, its consent to cutting or otherwise altering the Work.

§ 3.14.3 Patching of exposed Work shall only be performed by skilled workers of the required trade.

§ 3.15 Cleaning Up

§ 3.15.1 The Contractor shall keep the premises clean at all times of dirt, rubbish and debris resulting from the Work and shall remove all rubbish and debris in metal containers at the end of each Working day. The Contractor shall remove all rubbish cartons resulting from the installation of fixtures and equipment. If the premises are not kept clean at all times and if within 24 hours after verbal notice from the Owner the dirt, rubbish, and debris is not cleaned up by Contractor then Owner will arrange for such cleanup at the Contractor's expense. Prior to Substantial Completion of the Work the Contractor shall do the cleaning of the surfaces of all his installations as may be required by the various Specifications to the satisfaction of the Owner Representative or Architect.

§ 3.15.2 If the Contractor fails to clean up as provided in the Contract Documents, the Owner may do so and the Owner shall be entitled to reimbursement from the Contractor.

§ 3.15.3 In readiness for occupancy of the Owner, the Contractor, when directed by the Owner Representative, shall thoroughly clean all portions of the Work to be occupied and all applicable material and equipment surfaces suitable for occupancy. Cleaning of windows and other glass in the Project is a contractual requirement.

§ 3.15.4 The General Contractor shall make provisions for and be personally responsible for removing all mud and debris from all vehicles and equipment leaving the construction site onto Municipal streets adjoining the Project site and shall remove any mud, debris and litter which may fall upon Municipal streets or adjacent properties. If the same is not removed and properly washed down within 24 hours after verbal notice from the Municipality or the Owner then in that event, said mud, debris and litter shall be removed from the street by the Owner at the Contractor's expense.

§ 3.16 Access to Work

The Contractor shall provide the Owner, Owner Representative, and Architect with 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 hold the Owner and Architect harmless from loss on account thereof, but shall not be responsible for 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 or Architect. However, if an infringement of a copyright or patent is discovered by, or made known to, the Contractor, the Contractor shall be responsible for the loss unless the information is promptly furnished to the Architect.

§ 3.18 Indemnification

§ 3.18.1 To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Owner, Owner Representative, Architect, Architect's consultants, any agents and employees of any of them from and against claims, damages, losses and expenses, including but not limited to attorney's fees, arising out of or resulting from performance of the Work to the extent caused in whole or in part by the negligent act of 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 or indemnity which would otherwise exist as to a party or person described in this paragraph 3.18. Nothing contained herein shall be construed to require indemnification of any architect, engineer, or surveyor for damages or defense costs arising out of (1) the architect's, engineer's, or surveyor's preparation or approval of maps, drawings, opinions, reports, surveys, change orders, designs or specifications, or (2) the architect's, engineer's, or surveyor's giving or failing to give instructions or directions provided that failure or giving of directions or instructions is the primary cause of the damage.

§ 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 3.18.1 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.

3.19 Contractor shall indemnify Owner for any additional fees, cost or expense (beyond the base fee) charged to Owner by Architect or other project consultant pursuant to its own Agreement with Owner to the extent such additional fee, cost or expense is caused by Contractor's acts or omissions.

3.20 Owner may deduct amounts owed by Contractor pursuant to Paragraph 3.18 or 3.19 from payments otherwise due to Contractor, and upon request of Owner shall provide Contractor a copy of the written agreement requiring such additional payment.

ARTICLE 4 ARCHITECT

§ 4.1 General

§ 4.1.1 The Architect is the person or entity retained by the Owner pursuant to Section 2.3.2 and identified as such in the Agreement.

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

§ 4.1.3 In case of termination of employment of the Architect, the Owner shall appoint a successor Architect whose status under the Contract Documents shall be that of the former Architect.

§ 4.2 Administration of the Contract

§ 4.2.1 The Architect will provide administration of the Contract as described in the Contract Documents. The Architect will have authority to act on behalf of the Owner only to the extent provided in the Contract Documents.

Init.

§ 4.2.2 The Architect will visit the site at intervals appropriate to the stage of construction, or as otherwise agreed with the Owner, 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. The Architect will not have control over, charge of, or responsibility for the 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.

§ 4.2.2.1 The Owner is entitled to reimbursement from the Contractor for amounts paid to the Architect for site visits made necessary by the fault of the Contractor or by defects and deficiencies in the Work.

§ 4.2.3 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 promptly report to the Owner (1) known deviations from the Contract Documents, (2) known deviations from the most recent construction schedule submitted by the Contractor, and (3) defects and deficiencies observed in the Work. The Architect will not be responsible for the Contractor's failure to perform the Work in accordance with the requirements of the Contract Documents. The Architect will not have control over or charge of, and will not be responsible for acts or omissions of, the Contractor, Subcontractors, or their agents or employees, or any other persons or entities performing portions of the Work.

§ 4.2.4 Communications

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 Architect and Owner Representative about matters arising out of or relating to the Contract. Communications by and with the Architect's consultants shall be through the Architect. Communications by and with Subcontractors and suppliers shall be through the Contractor. Communications by and with Separate Contractors shall be through the Owner. The Contract Documents may specify other communication protocols.

§ 4.2.5 Based on the Architect's evaluations of the Contractor's Applications for Payment, the Architect will review and certify the amounts due the Contractor and will issue Certificates for Payment in such amounts.

§ 4.2.6 The Architect has authority to reject Work that does not conform to the Contract Documents. Whenever the Architect considers it necessary or advisable, the Architect will have authority to require inspection or testing of the Work in accordance with Sections 13.4.2 and 13.4.3, whether or not the Work is fabricated, installed or completed. However, neither this authority of the Architect nor a decision made in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the Architect to the Contractor, Subcontractors, suppliers, their agents or employees, or other persons or entities performing portions of the Work.

§ 4.2.7 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. Review of such 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 or systems, all of which remain the responsibility of the Contractor as required by the Contract Documents. The 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 Architect's review shall not constitute approval of safety precautions or 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.

§ 4.2.7.1 Architect's action on Shop Drawings will result in his making one of five notations on them, namely, NO EXCEPTION TAKEN, REVISE AND RESUBMIT, REJECTED/RESUBMIT, FURNISH AS CORRECTED or FURNISH AS CORRECTED/RESUBMIT. Such notations do not extend the responsibilities of the Architect beyond those described in 4.2.7.

§ 4.2.7.2 In no case will the Architect's review period on any submittal be less than fourteen (14) days after receipt of the submittal from the Contractor.

§ 4.2.8 The Architect will prepare Change Orders and Construction Change Directives and may order minor changes in the Work as provided in Section 7.4. The Architect will investigate and make determinations and recommendations regarding concealed and unknown conditions as provided in Section 3.7.4.

§ 4.2.9 The Architect will conduct inspections to determine the date or dates of Substantial Completion and the date of final completion; issue Certificates of Substantial Completion pursuant to Section 9.8; receive and forward to the Owner, for the Owner's review and records, written warranties and related documents required by the Contract and assembled by the Contractor pursuant to Section 9.10; and issue a final Certificate for Payment pursuant to Section 9.10.

§ 4.2.10 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 site. The Owner shall notify the Contractor of any change in the duties, responsibilities and limitations of authority of the Project representatives.

§ 4.2.11 The Architect will interpret and decide matters concerning performance under, and requirements of, the Contract Documents on written request of either the Owner or Contractor. The Architect's response to such requests will be made in writing within any time limits agreed upon or otherwise with reasonable promptness.

§ 4.2.12 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 Contractor, will not show partiality to either, and will not be liable for results of interpretations or decisions rendered in good faith. These provisions do not extend to deny normal discussion, recommendations, explanations, suggestions, approvals, rejections, and similar activity in pursuit of the Work of the project on an oral basis, such as at project meetings and otherwise at the Project site. In such instances the written minutes, correspondence, Shop Drawings Records, Architect's Supplemental Instructions and other written data shall govern over personal claims regarding statements made contrary to the written data. Interpretations of Contract Documents, to be effective for claim purposes or for justification as to proper procedure in performing the Work, must be obtained in writing before such claim is made or such Work begun.

§ 4.2.12.1 Written or graphic interpretations by the Architect will be considered as minor changes in the Work. If the Contractor determines that an interpretation offered by the Architect will affect Contract Sum or time, then the Contractor must return the interpretation to the Architect and Owner Representative within 5 days, along with complete substantiation of the proposed changes in Contract Time and/or Contract Sum and the Architect will render a decision

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

§ 4.2.14 The Architect will review and respond to requests for information about the Contract Documents. The Architect's response to such requests will be made in writing within any time limits agreed upon or otherwise with reasonable promptness. 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 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 a Separate Contractor or the subcontractors of a Separate Contractor.

§ 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 Within five (5) days of the Owner's execution of the Contract, the Contractor shall furnish a completed copy of Division 00 Document "Subcontractors and Major Materials Suppliers List" to the Owner through the Architect. List shall include the name of persons or entities (including those who are to furnish materials or equipment fabricated to a special design) proposed for each principal portion of the Work. In all cases, this list shall be submitted no less than seven (7) days prior to a Subcontractor starting work. Failure of the Owner or Architect to reply promptly within seven (7) days of submission shall constitute notice of no reasonable objection. Nothing herein shall obligate the Owner or Architect to conduct an investigation of any Contractor or Subcontractor.

§ 5.2.1.1 As soon as practical after the date of the Notice to Proceed, the Contractor shall furnish in writing to the Owner through the Architect the names of persons or entities proposed as manufacturers, fabricators or material suppliers for the products, equipment and systems identified in the Project Specifications and drawings and, where applicable, the name of the installing Subcontractor.

§ 5.2.2 The Contractor shall not contract with a proposed person or entity to whom the Owner 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 or Architect has reasonable objection to a person or entity proposed by the Contractor, the Contractor shall propose another to whom the Owner or Architect has no reasonable objection. There shall be no adjustment in the Contract Sum or Contract Time because of such substitution.

§ 5.2.4 The Contractor shall not substitute a Subcontractor, person, or entity for one previously selected if the Owner or Architect makes reasonable objection to such substitution.

§ 5.3 Subcontractual Relations

By appropriate written agreement, 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 the responsibility for safety of the Subcontractor's Work that the Contractor, by these Contract Documents, assumes toward the Owner and Architect. Each subcontract agreement shall preserve and protect the rights of the Owner 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.

§ 5.3.2 Where Contractor sublets portions of the Work, the entire responsibility for the subdividing of Work rests with the Contractor. The Owner and the Architect are not responsible for the manner of the subdivision of the Work and neither will enter into nor settle disagreements or disputes between Contractor and Subcontractors. The arrangement of Specifications and the manner of graphic illustration of Drawings are for convenience of reference and do not comprise any exacting method of subdividing Work for purposes of subcontracting, except where the Contract Documents require an undivided responsibility for certain Work.

§ 5.3.3 Contractor shall require each Subcontractor to (1) Inspect surfaces and job conditions before beginning Work at Project site, (2) Accept or cite necessary corrections in surfaces and job conditions before beginning Work at Project site, and (3) Protect his own materials, equipment and Work from damage, injury or loss due to weather or due to Work of the Contractor, other Subcontractors, or other Contractors. The best means of protection shall be supplied, and removed when no longer required.

§ 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; 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.

§ 5.4.3 Upon 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.

§5.5.1 Contractor shall pay each Subcontractor, upon receipt of payment from Owner, an amount equal to the percentage of completion allowed to Contractor on account of such Subcontractor's Work, less the percentage retained from payments to Contractor; Contractor shall also require each Subcontractor to make similar payments to Sub-subcontractors.

§5.5.2 If Owner fails to approve an Application for Payment for a cause which Owner and Architect determine is the fault of Contractor and not the fault of a particular Subcontractor, or if Contractor fails to make payment which is properly due to a particular Subcontractor, Owner may pay such Subcontractor directly, less the amount to be retained under its Subcontract. Any amount so paid by Owner shall be repaid to Owner by Contractor. Owner shall have no obligation to pay or to see to the payment of any monies to any Subcontractor. Nothing contained in Paragraph 5.5 shall be deemed to create any contractual relationship between Owner and any Subcontractor or to create any rights in any Subcontractor against Owner. Contractor shall promptly advise Owner of any claim or demand by a Subcontractor claiming that any amount is due to such Subcontractor or claiming any default by Contractor in any of its obligations to such Subcontractor.

ARTICLE 6 CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS

§ 6.1 Owner's Right to Perform Construction and to Award Separate Contracts

§ 6.1.1 The term "Separate Contractor(s)" shall mean other contractors retained by the Owner under separate agreements. The Owner reserves the right to perform construction or operations related to the Project with the Owner's own forces, and with Separate Contractors retained under Conditions of the Contract substantially similar to those of this Contract, including those provisions of the Conditions of the Contract related to insurance and waiver of subrogation.

§ 6.1.2 When separate contracts are awarded for different portions of the Project or other construction or operations on the site, the term "Contractor" in the Contract Documents in each case shall mean the Contractor who executes each separate Owner-Contractor Agreement.

§ 6.1.3 Neither the Owner, Owner Representative nor the Architect or its Consultants shall be responsible for the coordination of the Contractor's Work. Coordination of the Contractor's Work shall be governed by Division 01 Sections "Multiple Contract Summary" and "Project Management and Coordination."

§ 6.1.3.1 Reference subparagraph 3.3.7.

§ 6.1.4 Unless otherwise provided in the Contract Documents, when the Owner performs construction or operations related to the Project with the Owner's own forces or with Separate Contractors, the Owner or its Separate Contractors shall have the same obligations and rights that the Contractor has 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 and Separate 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 or a Separate Contractor, the Contractor shall, prior to proceeding with that portion of the Work, promptly notify the Architect of apparent discrepancies or defects in the construction or operations by the Owner or Separate Contractor that would render it unsuitable for proper execution and results of the Contractor's Work. Failure of the Contractor to notify the Architect of apparent discrepancies or defects prior to proceeding with the Work shall constitute an acknowledgment that the Owner's or Separate Contractor's completed or partially completed construction is fit and proper to receive the Contractor's Work. The Contractor shall not be responsible for discrepancies or defects in the construction or operations by the Owner or Separate Contractor that are not apparent.

§ 6.2.3 Cost attributed to delays or improperly timed activities or defective construction shall be borne by the parties responsible therefor. Owner, Owner Representative and Architect who shall not be liable to any Contractor, Subcontractor or Sub-subcontractor for claims or damages of monetary or other nature caused by or arising out of delays contemplated or not contemplated at the signing of the Contract, except for delays directly caused by the active interference of the Owner. The sole remedy against the Owner for delays, other than delays directly caused by the Owner's active interference, shall be the allowance to a successful claimant of additional time for completion of Work. To the extent necessary to effectuate the terms and conditions of this subparagraph, the separate contractors are granted third party beneficiary status to this Contract between Owner and Contractor.

§ 6.2.4 The Contractor shall promptly remedy damage wrongfully caused by the Contractor to completed or partially completed construction or to property of the Owner or separate contractors.

§ 6.2.5 The Owner and each Separate Contractor shall have the same responsibilities for cutting and patching as are described for the Contractor in Section 3.14.

§ 6.2.6 The Contractor shall indemnify and hold the Owner harmless from any claims or damages brought by a separate contractor against the Owner arising out of actions or omissions of the Contractor, its Subcontractors or suppliers in performing their Work under the Contract Documents.

§ 6.2.7 Should the Contractor wrongfully cause damage to the Work or property of any separate contractor, the Contractor shall, upon due notice, promptly attempt to settle with the separate contractor by agreement, or otherwise to resolve the dispute. Such dispute shall not delay the completion of the Work. Work shall be continued by the separate contractor claiming damages at his expense subject to his right to recover damages. If such separate contractor sues the Owner, Owner Representative, or the Architect on account of any damage alleged to have been caused by the Contractor, then the Owner or Architect shall notify the Contractor who shall defend such proceedings at the Contractor's expense, and if any judgment or award against the Owner, Owner Representative, or Architect arises therefrom the Contractor shall pay or satisfy it and shall reimburse the Owner, Owner Representative, or Architect for all attorneys' fees and court costs which the Owner, Owner's Representative or Architect has incurred.

§ 6.3 Owner's Right to Clean Up

If a dispute arises among the Contractor, Separate 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 Architect will allocate the cost among those responsible.

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, by Change Order, Construction Change Directive 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, Contractor, and Architect. A Construction Change Directive requires agreement by the Owner 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 alone.

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

§ 7.1.4 Matters involving extra Work and changes in the Work are subject to the following provisions:

§ 7.1.4.1 Owner reserves the right to accept or reject Contractor's quotation of cost, and to require more than one quotation, to accept one or more quotations or reject one, more, or all quotations. Contractor may not make a charge of any kind regarding proposed extra Work or proposed changes in the Work that were not accepted.

§ 7.1.4.2 Contractor agrees that quotations for changes in the Work and for extra Work will not include charges involving penalties or damages for assumed delays in the Work, charges for estimating, cancellation charges on prior rejected Work, and similar amounts which do not relate directly to costs of labor and material and equipment appurtenant to Work involved.

§ 7.1.4.3 Unless Contract Time must be unchanged and is so stated in Architect's Supplemental Instructions, extra time granted to Contractor because of extra Work or changes in the Work shall be final, without penalty regarding the essence of time in the Contract.

§ 7.1.4.4 No charges by Contractor for extra Work or changes in the Work, nor claims on account thereof, shall be valid unless duly authorized in the procedure herein described. Written authority to perform extra Work or changes in the Work must be in possession of Contractor before such Work commences in order that Contractor's right to payment on account thereof may be valid.

§ 7.1.4.5 In order to facilitate checking of quotations for adjustments in the Contract Sum, all proposals, except those so minor that their propriety can be seen by inspection, shall be accompanied by a complete itemization of costs including, labor, materials and subcontracted. Labor and materials shall be itemized in the manner prescribed above. When major cost items are subcontracted, these costs shall be itemized also.

§ 7.2 Change Orders

§ 7.2.1 A Change Order is a written instrument prepared by the Architect and signed by the Owner, Contractor, and Architect 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.

§ 7.2.2 Contractor is responsible for submitting accurate cost and pricing data to support its proposals for Change Orders and other Contract price adjustments under the Contract Documents. Contractor shall certify in writing that to the best of its knowledge and belief, the cost and pricing data submitted is accurate, complete, current and in accordance with the terms of the Contract Documents with respect to pricing of Change Orders. Contractor shall also certify in writing that it has made reasonable good faith inquiries to appropriate individuals within its organization to confirm that the data submitted is accurate, complete and current. The above-described certification shall be required for all Change Order requests with a positive or negative value greater than \$1,000.00. If it is later determined by audit or by other means that the cost and pricing data submitted is inaccurate, incomplete, not current, or not in compliance with the terms of the Contract Documents regarding the pricing of Change Orders, then an appropriate Contract Sum reduction shall be made.

§ 7.2.3 Contractor shall perform the Work of Change Orders only with personnel appropriate for the tasks performed. Should Contractor use overqualified personnel, Contractor shall only be entitled to payment for the Work at the wage rate of the appropriate personnel, plus the applicable multipliers noted in 7.1.3.

§7.2.4 Any Contractor creating the need for Additional Services by Architect, with respect to a Change Order, shall pay all costs associated with such Additional Services, and Architect shall prepare and present to Owner for approval, a Change Order or Construction Change Directive regarding such costs.

§ 7.3 Construction Change Directives

§ 7.3.1 A Construction Change Directive is a written order prepared by the Architect and signed by the Owner 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 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 7.3.4.

§ 7.3.4 If the Contractor does not respond promptly or disagrees with the method for adjustment in the Contract Sum, Owner Representative with input from the Architect shall determine 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 amount for overhead and profit as set forth in the Agreement, or if no such amount is set forth in the Agreement, a reasonable amount. In such case, and also under Section 7.3.3.3, the Contractor shall keep and present, in such form as the Owner Representative with input from the Architect may prescribe, an itemized accounting together with appropriate supporting data. Unless otherwise provided in the Contract Documents, costs for the purposes of this Section 7.3.4 shall be limited to the following:

- .1 Costs of labor, including applicable payroll taxes, fringe benefits required by agreement or custom, workers' compensation insurance, and other employee costs approved by the Architect;
- .2 Costs of materials, supplies, and equipment, including cost of transportation, whether incorporated or consumed;
- .3 The allowance for overhead and profit, included in the total cost to the Owner, shall not exceed a combined total of fifteen percent (15%). Overhead and profit shall include costs of premiums or all bonds and insurance, permit fees, and sales, use or similar taxes related to the Work and additional costs of supervision and field office personnel directly attributable to the change.
- .4 The Contractor shall limit its profit and overhead, when combined with that of its Subcontractors and Sub-subcontractors, to a total of fifteen percent (15%) of the value of the related Work.
- .5 If the Work is paid for using a Contract allowance the cost of insurance and bonds will be deducted from the fifteen percent (15%) allowable for overhead and profit.

§ 7.3.5 If the Contractor disagrees with the adjustment in the Contract Time, the Contractor may make a Claim in accordance with applicable provisions of Article 15.

§ 7.3.6 Upon receipt of a Construction Change Directive, the Contractor shall promptly proceed with the change in the Work involved and advise the Architect in writing 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.

§ 7.3.7 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.

§ 7.3.8 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 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 Work completed under the Construction Change Directive in Applications for Payment. The Owner Representative with input from the Architect will make an interim determination for purposes of monthly certification for payment for those costs and certify for payment the amount that the Architect determines, in the Architect's professional judgment, to be reasonably justified. The Architect's interim determination of cost shall adjust the Contract Sum on the same basis as a Change Order, subject to the right of the Contractor to disagree and assert a Claim in accordance with Article 15.

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

§ 7.4 Minor Changes in the Work

§ 7.4.1 The Architect may order minor changes in the Work that are consistent with the intent of the Contract Documents and do not involve an adjustment in the Contract Sum or an extension of the Contract Time. The Architect's order for minor changes shall be in writing. If the Contractor believes that the proposed minor change in the Work will affect the Contract Sum or Contract Time, the Contractor shall notify the Owner Representative and Architect in writing and shall not proceed to implement the change in the Work. If the Contractor performs the Work set forth in the Architect's order for a minor change without prior written notice to the Owner Representative and Architect that such change will affect the Contract Sum or Contract Time, the Contractor waives any adjustment to the Contract Sum or extension of the Contract Time.

§ 7.4.1.1 Minor changes to the Work may be made by meeting memos, or an Architect's Supplemental Instruction.

§ 7.4.1.2 The Work described therein shall be promptly executed in accordance with the Contract Documents. Proceeding with the Work indicates the Contractor's acknowledgment that there will be no change in the Contract Sum or the Contract Time.

§ 7.4.1.3 If it is the conclusion of the Contractor that the Work described therein requires an adjustment of the Contract Sum, or of the Contract Time, the Contractor shall issue a fully itemized proposal within five (5) Working days or shall notify the Owner Representative and Architect in writing of the date by which such proposal shall be received. When the Work alters the Contract Time or the Contract Sum, the Work described therein shall not be executed without a Change Order signed by the Architect and Owner. Failure to issue a proposal or written notification to the Architect and Owner Representative within the appropriate time shall indicate the Contractor's acknowledgment that there will be no change in the Contract Sum or the Contract Time.

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 Time is a reasonable period for performing the Work.

§ 8.2.2 The Contractor shall not, except by agreement or instruction of the Owner in writing, commence the Work prior to the effective date of insurance required to be furnished by the Contractor and Owner.

§ 8.2.3 The Contractor shall proceed expeditiously with adequate qualified forces and shall achieve Substantial Completion within the Contract Time.

§ 8.3 Delays and Extensions of Time

§ 8.3.1 If the Contractor is delayed at any time in the commencement or progress of the Work by (1) an act or neglect of the Owner or Architect, of an employee of either, or of a Separate Contractor; (2) by changes ordered in the Work; (3) by labor disputes, fire, unusual delay in deliveries, unavoidable casualties, adverse weather conditions documented in accordance with Section 15.1.6.2, or other causes beyond the Contractor's control; (4) by delay authorized by the Owner pending any dispute resolution; or (5) by other causes that the Contractor asserts, and the Architect determines, justify delay, then the Contract Time shall be extended 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.

§ 8.3.3 Notwithstanding anything to the contrary in the Contract Documents, an extension in the Contract Time, to the extent permitted under this paragraph 8.3, shall be the sole remedy of the Contractor against Owner, Owner Representative or Architect for (1) delay in the commencement, prosecution or completion of the Work; (2) hindrance or obstruction in the performance of the Work; (3) loss of productivity; or (4) other similar claims (collectively referred to in this subparagraph as delays) whether or not such delays are foreseeable, unless a delay is directly caused by the acts of the Owner constituting active interference with the Contractor's performance of the Work, and only to the extent that such acts continue after the Contractor furnishes the Owner with written notice of such interference.

ARTICLE 9 PAYMENTS AND COMPLETION

§ 9.1 Contract Sum

§ 9.1.1 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.

§ 9.1.2 If unit prices are stated in the Contract Documents or subsequently agreed upon, and if quantities originally contemplated are materially changed so that application of such unit prices to the actual quantities causes substantial inequity to the Owner or Contractor, the applicable unit prices shall be equitably adjusted.

§ 9.2 Schedule of Values

Where the Contract is based on a stipulated sum or Guaranteed Maximum Price, the Contractor shall submit a schedule of values to the Architect and Owner Representative before the first Application for Payment, allocating the entire Contract Sum to the various portions of the Work. The schedule of values shall be prepared in the form, and supported by the data to substantiate its accuracy, required by the Architect. This schedule, unless objected to by the Architect or Owner Representative, shall be used as a basis for reviewing the Contractor's Applications for Payment. Any changes to the schedule of values shall be submitted to the Architect and Owner Representative and supported by such data to substantiate its accuracy as the Architect may require, and unless objected to by the Architect and Owner Representative, shall be used as a basis for reviewing the Contractor's subsequent Applications for Payment.

§ 9.3 Applications for Payment

§ 9.3.1 The Contractor shall submit to the Owner Representative and Architect an itemized application for payment for operations completed in accordance with the Schedule of Values not later than the 25th day of each month for the Work of that month. The Owner shall make payment to the Contractor not later than 10 business days after the second regularly scheduled School Board meeting of the Owner following Architect's and Owner Representative approval of Application of Payment. Reference Division 01 Section "Payment Procedures."

§ 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 Architect, but not yet included in Change Orders.

§ 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 supplier, unless such Work has been performed by others whom the Contractor intends to pay.

§ 9.3.1.3 Work applicable to the Contract Sum shall be kept separate from Work applicable to Change Orders. The Work of each shall contain a summary and a breakdown as stipulated by the Contract Documents.

§ 9.3.1.4 Contractor expressly waives any right to penalties, interest and attorney's fees pursuant to the prompt payment provisions of the Pennsylvania Commonwealth Procurement Code, 62 Pa. C.S. §3931 et seq..

§ 9.3.2 Payment on account of materials and equipment shall be made subject to the following:

§ 9.3.2.1 Materials Stored On Site. Materials properly stored at the construction site may be included in the Contractor's application for payment, subject to the following conditions: (1) All materials shall be stored in strict compliance with the manufacturer's recommendations in secure, dry, and where appropriate, temperature controlled enclosures; (2) Contractor shall provide property insurance covering materials stored at the construction site to the extent that Owner's property insurance does not provide coverage; (3) Contractor shall provide an accurate inventory of all materials included for payment with each application for payment. Contractor shall maintain the inventory until the materials are installed or otherwise incorporated into the Work; and (4) Payment for materials stored on the construction site shall be limited to the actual, invoiced cost to the Contractor, F.O.B. the construction site. Contractor shall warrant that all suppliers are promptly paid in full for all materials included for payment and that materials are not encumbered by any lien, claim or mortgage that would prevent the Owner from taking full possession of the materials. Contractor shall produce satisfactory evidence of same to Owner.

§ 9.3.2.2 Materials Stored Off Site. Materials stored off the construction site shall not be included for payment in the Contractor's application for payment unless prior approval of the Owner has been obtained. Payment for materials stored off the construction site shall be subject to the conditions in subparagraph 9.3.2.1 and the following additional conditions:

- .1 Contractor shall provide property insurance for the full cost of the materials stored off the construction site;
- .2 Contractor shall provide a bill of sale for the materials granting clear title to the materials to the Owner;
- .3 Contractor shall provide waivers of liens when applicable, encumbrances or claims relating to the bailment of the materials stored off site or as otherwise required by Owner;
- .4 Contractor shall provide Owner all information necessary for the filing of any notices under the Uniform Commercial Code relating to the materials stored off the construction site as may be required by Owner;
- .5 The materials stored off the construction site shall be clearly and conspicuously labeled so as to identify Owner's title to the materials and shall be segregated and not commingled with other materials at the storage location;
- .6 Contractor shall pay all storage costs, shall be responsible for any damage or deterioration of the materials while in storage or in transit to the construction site and shall pay the costs of inspection of the materials in storage by the Owner;
- .7 Contractor shall be responsible for and shall pay all costs of transportation of the materials to the construction site; and
- .8 Neither Owner's payment for materials stored off the construction site nor the transfer of title to Owner shall in any way reduce Contractor's liability for the complete installation and construction relating to said materials, the value of the materials or liability under any performance bond provided for the Project.

§ 9.3.2.3 No separate payment will be made for submittal preparation, unless approved by Architect.

§ 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, suppliers, or other persons or entities that provided labor, materials, and equipment relating to the Work.

§ 9.4 Certificates for Payment

§ 9.4.1 The Architect will, within seven days after receipt of the Contractor's Application for Payment, either (1) issue to the Owner a Certificate for Payment in the full amount of the Application for Payment, with a copy to the Contractor; or (2) issue to the Owner a Certificate for Payment for such amount as the Architect determines is properly due, and notify the Contractor and Owner of the Architect's reasons for withholding certification in part as provided in Section 9.5.1; or (3) withhold certification of the entire Application for Payment, and notify the Contractor and Owner of the Architect's reason for withholding certification in whole as provided in Section 9.5.1.

§ 9.4.2 The issuance of a Certificate for Payment will constitute a representation by the Architect to the Owner, based on the Architect's evaluation of the Work and the data in the Application for Payment, that, to the best of the Architect's knowledge, information, and belief, the Work has progressed to the point indicated, the quality of the Work is in accordance with the Contract Documents, and that the Contractor is entitled to payment in the amount certified. The foregoing representations 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 Architect. However, the issuance of a Certificate for Payment will not be a representation that the Architect has (1) made exhaustive or continuous on-site inspections to check the quality or quantity of the Work; (2) reviewed construction means, methods, techniques, sequences, or procedures; (3) reviewed copies of requisitions received from Subcontractors and 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 Architect may withhold a Certificate for Payment in whole or in part, to the extent reasonably necessary to protect the Owner, if in the Architect's opinion the representations to the Owner required by Section 9.4.2 cannot be made. If the Architect is unable to certify payment in the amount of the Application, the Architect will notify the Contractor and Owner as provided in Section 9.4.1. If the Contractor and Architect cannot agree on a revised amount, the Architect will promptly issue a Certificate for Payment for the amount for which the Architect is able to make such representations to the Owner. The Architect may also withhold a Certificate for Payment or, because of subsequently discovered evidence, may nullify the whole or a part of a Certificate for Payment previously issued, to such extent as may be necessary in the Architect's opinion to protect the Owner from loss for which the Contractor is responsible, including loss resulting from acts and omissions described in Section 3.3.2, because of

- .1 defective Work not remedied;
- .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 suppliers 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 damages for the anticipated delay; or
- .7 repeated failure to carry out the Work in accordance with the Contract Documents.
- .8 Failure to comply with government statutes, regulations and laws.

§ 9.5.2 When the Contractor disputes the Architect's decision regarding a Certificate for Payment under Section 9.5.1, in whole or in part, then the Contractor may submit a Claim in accordance with Article 15. If the Owner disputes the Architect's decision regarding a Certificate for Payment, then the Owner shall advise the Architect, the Contractor, and the Owner's Representative in writing within seven (7) days of the reason for the dispute and shall pay any undisputed portion of the Certificate for Payment in accordance with the Contract Documents. Upon resolution of any amount in dispute, the Owner will pay the amount determined by the resolution within 45 days.

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

§ 9.5.4 If the Architect withholds certification for payment under Section 9.5.1.3, the Owner may, at its sole option, issue joint checks to the Contractor and to any Subcontractor or supplier 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 Contractor shall reflect such payment on its next Application for Payment.

§ 9.6 Progress Payments

§ 9.6.1 After the Architect has issued a 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 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. Contractor and each Subcontractor shall comply with the payment obligations of Section 3933 of the Pennsylvania Commonwealth Procurement Act, 62 Pa.C.S. § 3933.

§ 9.6.3 The Architect 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 Architect and Owner 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 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 and suppliers to ascertain whether they have been properly paid. Neither the Owner nor Architect shall have an obligation to pay, or to see to the payment of money to, a Subcontractor or supplier, except as may otherwise be required by law.

§ 9.6.5 The Contractor's payments to suppliers shall be treated in a manner similar to that provided in Sections 9.6.2, 9.6.3 and 9.6.4.

§ 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 To ensure satisfactory completion of the Work under the Contract Documents, the Owner shall withhold retainage from each progress payment in the amount of ten percent (10%) of the amount due the Contractor until fifty percent (50%) of the Work is completed. When fifty percent (50%) of the Work is completed, one-half (½) of the amount retained by Owner shall be returned to Contractor provided the Owner Representative with input from the Architect approves the Application for Payment and provided further that the Contractor is making satisfactory progress and there is no specific cause for greater withholding. Thereafter, the Owner shall withhold retainage from each progress payment in the amount of five percent (5%) of the value of the Work completed based on monthly progress payment requests until Substantial Completion. However, in the event a dispute arises between Owner and a separate contractor, which dispute is based upon increased costs claimed by the separate contractor occasioned by delays or other actions of the Contractor, additional retainage in the sum of one and a half (1-½) times the amount of any possible liability may be withheld until such time as a final resolution is agreed to by all parties directly or indirectly involved unless the Contractor furnishes a bond satisfactory to Owner to indemnify Owner against the claim.

§ 9.6.8 Contractor acknowledges that the project is for a public purpose and neither the Contractor, nor any subcontractor of any tier, nor any supplier of any tier may place a mechanic's lien on the Owner's property. Contractor will include a provision in each subcontract and supply contract acknowledging the absence of mechanic's lien rights. The Contractor shall defend and indemnify the Owner from all loss, liability, damage or expense, including reasonable attorney's fees and litigation expenses, arising out of any lien claim or other claim for payment by any Subcontractor or supplier of any tier. Upon receipt of notice of a lien claim or other claim for payment, the Owner shall notify the Contractor.

§ 9.7 Failure of Payment

If the Architect does not issue a Certificate for Payment, through no fault of the Contractor, within seven days after 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 Architect or awarded by binding dispute resolution, then the Contractor may, upon thirty additional days' notice to the Owner 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 shutdown, 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 so that the Owner can occupy or utilize the Work for its intended use.

§ 9.8.2 When the Contractor considers that the entire Work or the Work of a separate Phase (as defined in Division 01 Section "Summary" or on Phasing Drawings) is substantially complete, the Contractor shall prepare and submit to the Architect and Owner Representative a comprehensive list of items to be completed or corrected (punch list) along with an application by the Contractor for Certification of Substantial Completion by the Architect. The Contractor shall proceed to promptly complete and correct items on the list. Failure to include an item on such list 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 Contractor's list of items to be completed or corrected (Punch List) and Application for Certification of Substantial Completion, the Architect will make an inspection to determine whether the Work or designated portion thereof is substantially complete, Architect will conduct said inspection within thirty (30) days of receipt of the application of Contractor for Certification of Substantial Completion. If the Architect's inspection discloses any item, whether included in the Contractor's list, which is not sufficiently complete in accordance with the Contract Documents so that 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 upon notification of the Architect. In such case, the Contractor shall then submit a request for another inspection by the Architect to determine Substantial Completion.

§ 9.8.3.1 The Architect will perform no more than two (2) inspections to determine whether the Work or a designated portion thereof has attained Substantial Completion in accordance with the Contract Documents. The Owner is entitled to reimbursement from the Contractor for amounts paid to the Architect for any additional inspections.

§ 9.8.4 When the Work or designated portion thereof is substantially complete, the Architect will prepare a Certificate of Substantial Completion that shall establish the date of Substantial Completion; establish responsibilities of the Owner and Contractor for security, maintenance, heat, utilities, damage to the Work and insurance; and fix the time within which the Contractor shall finish all items on the list accompanying the Certificate. Warranties required by the Contract Documents shall commence on the date of Substantial Completion of the Work or designated portion thereof unless otherwise provided in the Certificate of Substantial Completion or Contract Documents. If Contractor fails to complete a comprehensive list of items to be completed or corrected as stipulated in subparagraph 9.8.2, the Architect or any of its consultants or representatives shall prepare such punch list(s) and the Contractor will be responsible for professional fees and services of the Architect and/or consultants incurred in this regard. Such costs will be back charged to Contractor and deducted from any existing retainage or subsequent Application for Payment.

§ 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 the Certificate. Upon such acceptance, and consent of surety if any, the Owner shall make payment of retainage applying to the 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 In no case shall the time established for the completion and correction of items on the list extend beyond sixty (60) days after Certification of Substantial Completion, except for delay beyond the Contractor's control. The Contractor shall pay for all architectural and consultant services incurred thereafter due to the failure of Contractor to complete and / or correct the Work on the list or to submit documentation and items required for final completion and final payment. Payment for additional architectural and consultant services shall be deducted from the Contract amount.

§ 9.8.7 Upon Substantial Completion of the Work or designated portion thereof, application by the Contractor and certification by the Architect, the Owner, shall within forty-five (45) days thereof, make Payment to the Contractor in the full Contract Sum less one and one half (1-1/2) time such amount that is required to complete and / or correct any

then remaining items, plus any other amounts properly withheld in accordance with the Contract Documents, which amount shall be certified by the Architect.

§ 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 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. When the Contractor considers a portion substantially complete, the Contractor shall 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. The Contractor shall not withhold Partial Occupancy or Use from the Owner due to failure by the Contractor to complete the Work in accordance with the Contract Documents in the time stipulated in the Agreement and approved Change Orders for extension of time.

§ 9.9.2 Immediately prior to such partial occupancy or use, the Owner, 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.

§ 9.10 Final Completion and Final Payment

§ 9.10.1 Upon receipt of the Contractor's notice that the Work is ready for final inspection and acceptance and upon receipt of a final Application for Payment, the Architect will promptly make such inspection. When the Architect finds the Work acceptable under the Contract Documents and the Contract fully performed, the Architect will promptly issue a final Certificate for Payment stating that to the best of the Architect's knowledge, information and belief, and on the basis of the Architect's on-site visits and inspections, the Work has been completed in accordance with 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 Architect's final 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.

§ 9.10.1.1 The Contractor shall perform and complete his Work according to the Contract Documents without fault or defect of any kind. In absence of more specific directives, and insofar as applicable the Work shall:

- .1 Be completed in a first-class manner;
- .2 Be placed in a thoroughly clean and unmarred condition.
- .3 Be checked out in a step-by-step manner to be certain that all fastenings, controls, valves, safety devices, operating devices and other required appurtenance have been provided in accordance with the Contract Documents.
- .4 Be free of previously condemned or rejected parts be properly restored to the extent thereof; and
- .5 Be balanced for proper operation wherever adjustments for balancing may exist in the Work.

§ 9.10.1.2 The Architect will perform no more than **two (2)** inspections to determine whether the Work or a designated portion thereof has attained Final Completion in accordance with the Contract Documents. The Owner is entitled to reimbursement from the Contractor(s) responsible for the need for additional inspections for amounts paid to the Architect for any additional inspections.

§ 9.10.1.3 The Architect shall make final inspection within thirty (30) days following receipt of the Contractor's request for final inspection and final Application for Payment.

§ 9.10.2 Neither final payment nor any remaining retained percentage shall become due until the Contractor submits to the Architect (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, (3) a written statement that the Contractor

knows of no 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, (5) documentation of any special warranties, such as manufacturers' warranties or specific Subcontractor warranties, and (6) other data establishing payment or satisfaction of obligations, such as receipts and 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, claim, security interest, or encumbrance. If a lien, claim, security interest, or encumbrance remains unsatisfied after payments are made, the Contractor or its surety shall refund to the Owner all money that the Owner may be compelled to pay in discharging the lien, claim, security interest, or encumbrance, including all costs and 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 Architect so confirms, the Owner shall, upon application by the Contractor and certification by the Architect, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed, corrected, 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 the 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 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 not constitute a waiver of Claims by the
(Paragraphs deleted)
Owner.

§ 9.10.5 Acceptance of final payment by the Contractor, a Subcontractor, or a supplier, shall constitute a waiver of 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.

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.

§ 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, students and staff occupying and traveling to and from the existing building on site 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, a Subcontractor, or a Sub-subcontractor; and
- .3 other property at the 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.

§ 10.2.2 The Contractor shall comply with, and give notices required by applicable laws, 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 implement, erect, and maintain, as required by existing conditions and performance of the Contract, reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards; promulgating safety regulations; and notifying the owners and users of adjacent sites and utilities of the safeguards.

§ 10.2.4 When use or storage of explosives or other hazardous materials or equipment, or unusual methods are necessary for execution of the Work, the Contractor shall exercise utmost care and carry on such activities under supervision of properly qualified personnel.

§ 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 and 10.2.1.3 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 and 10.2.1.3. The Contractor may make a Claim for the cost to remedy the damage or loss to the extent such damage or loss is attributable to acts or omissions of the Owner or Architect or anyone directly or indirectly employed by either of them, or by anyone for whose acts either 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 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.

§ 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, notice of the 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 provide and maintain in good operating condition suitable and adequate fire protection equipment and services and shall comply with all reasonable recommendations of the fire insurance company carrying insurance on the Work or by the local fire chief or fire marshal. The area within the site limits shall be kept orderly and clean and all combustible rubbish shall be promptly removed from the Project site.

10.2.9 The Contractor shall at all times protect excavations, trenches, buildings and materials from rainwater, ground water, back up or leakage of sewers, drainage or other piping, and from water of any other origin and shall remove promptly any accumulation of water. Contractor shall provide and operate all pumps, piping and other equipment necessary to this end.

10.2.10 The Contractor shall remove snow or ice which may result in damage, delay or hazardous conditions.

10.2.11 The Contractor shall take all precautions necessary to prevent loss or damage caused by vandalism, theft, burglary, pilferage, or unexplained disappearance of property of the Owner, whether forming part of the Work, located within those areas of the Project to which the Contractor has access. The Contractor shall have full responsibility for the security of such property of the Owner located in such areas and shall reimburse the Owner for any such loss, damage or injury, including Owner's deductible on Builder's Risk Insurance except such as may be directly caused by agents or employees of the Owner.

§10.2.12 Contractor shall promptly report in writing to Owner and Architect all accidents, other than minor accidents for which no medical treatment is required, 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 whether or not Owner has actual knowledge of the accident. In addition, if death or serious personal injury or serious damage are caused, the accident shall be reported immediately by telephone or messenger to Owner and Architect.

§ 10.3 Hazardous Materials and Substances

§ 10.3.1 In the event the Contractor encounters on the site material reasonably believed to be asbestos or polychlorinated biphenyl (PCB) or other hazardous or toxic substance which has not been rendered harmless or identified in the Contract Documents to be removed, the Contractor shall immediately stop the Work in the area affected and report the condition to the Owner and Architect in writing. The Work in the affected areas shall not thereafter be resumed, if in fact the material is asbestos or polychlorinated biphenyl (PCB) or other hazardous or toxic

substance and has not been rendered harmless except as authorized by any governmental agency having jurisdiction over such matter (e.g. DEP, EPA...) and upon written recommendation of a properly licensed environmental consultant retained by Owner. The Work in the affected areas shall be resumed in the absence of asbestos or polychlorinated biphenyl (PCB) or other hazardous or toxic substance, or when it has been rendered harmless and removed, in accordance with any required determination of a governmental agency having jurisdiction over such matters and upon the written recommendation of a properly licensed environmental consultant retained by Owner. The Contract Time shall be extended appropriately. Contractor shall not be entitled to any compensation or recovery of any damages, in connection with any delay, as more fully set forth in Subparagraph 8.3.3.

§ 10.3.2 To the extent covered by the Owner's applicable insurance policies, the Owner shall indemnify and hold harmless the Contractor, Architect, Owner Representative, Architect's consultants and agents and employees of any of them from and against claims, damages, losses and expenses, including but not limited to attorney's fees, arising out of or resulting from performance of the Work in the affected area if in fact the material is asbestos or polychlorinated biphenyl (PCB) or other hazardous or toxic substance 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), but only to the extent caused in whole or in part by negligent acts or omissions of the Owner. Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity which would otherwise exist as to a party or person described in this Paragraph 10.3.3.

§ 10.3.3 To the extent covered by the Owner's insurance policies, the Owner shall indemnify and hold harmless the Contractor, Subcontractors, Owner Representative, Architect, 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 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.

§ 10.3.4 The Owner shall not be responsible under this Section 10.3 for hazardous materials or substances the Contractor brings to the site unless such materials or substances are required by the Contract Documents.

§ 10.3.5 The Contractor shall reimburse the Owner for the cost and expense the Owner incurs (1) for remediation of hazardous materials or substances 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.

§ 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 reimburse the Contractor for all cost and expense thereby incurred.

§ 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.

ARTICLE 11 INSURANCE AND BONDS

§ 11.1 Contractor's Insurance and Bonds

§ 11.1.1 The Contractor shall purchase and maintain insurance of the types and limits of liability, containing the endorsements, and subject to the terms and conditions, as described in the Agreement or elsewhere in the Contract Documents. The Contractor shall purchase and maintain the required insurance from an insurance company or insurance companies lawfully authorized to issue insurance in the jurisdiction where the Project is located and to which the Owner has no reasonable objection. All such policies shall waive subrogation in favor of the Owner, the Owner's Representative, and the Architect.

§ 11.1.1.1 The Owner, its officers, directors, and employees, Owner Representative, the Owner's Representative, the Architect, and Architect's consultants, and each of their officers, directors, and employees, shall be named as additional insureds under the Contractor's insurance policies required hereunder, other than Workers Compensation,

on a primary and non—contributory basis, for losses arising from the negligence of the Contractor(s) or their Affiliates, or anyone for whom they may be liable. If coverage is written on a "claims made" basis, Contractor warrants the purchase of an extended reporting period of not less than three (3) years. Additional insured status shall include defense and shall apply to both ongoing and completed operations, for a period of not less than three (3) years after completion of services. Contractor shall be responsible for the payment of all deductibles or self-insured retentions applicable to its insurance coverages.

11.1.1.2 Certificates of Insurance acceptable to the Owner and on forms approved by the Insurance Commissioner of the Commonwealth of Pennsylvania shall be filed with the Owner (certificate holder) prior to commencement of the Work. Policies must provide for written notice to the Contractor or additional insureds prior to cancellation, reduction or non-renewal.

11.1.1.3 The minimum levels of insurance shall be as follows:

Workers Compensation	Amounts and coverage as required by Law and the Excess Liability Insurance Company
Employer's Liability	\$1,000,000 per accident/\$1,000,000 per employee/\$1,000,000 policy limit
Commercial General Liability	\$1,000,000 per occurrence/\$3,000,000 aggregate for bodily injury and property damage
Automobile Liability	\$1,000,000 per accident for bodily injury, death of any person and property damage arising out of ownership, maintenance, and use of motor vehicles, plus other coverage as required by law
Owned and Non-Owned Aircraft.	If an aircraft, whether owned or non-owned by the Contractor or any Subcontractor, is used in connection with the Work by the Contractor or any Subcontractor of any tier, the Contractor or Subcontractor, as applicable, shall advise the Owner or its representatives, shall provide a written explanation of the planned use of the aircraft, and shall provide Aircraft Liability Insurance at its sole cost and expense, the conditions and limits to be established by the Owner. The Owner reserves the right to prohibit the use of any aircraft in connection with the Work under this Contract. The minimum limit will be Five Million Dollars (\$5,000,000). This insurance shall be primary to all other insurance.
Excess (Umbrella) Liability Insurance	Five million dollars (\$5,000,000) per occurrence over the general liability, employer's liability, automobile liability, and owned and non-owned aircraft liability coverages. In no event shall any excess or umbrella insurance provide narrower coverage than the underlying primary policies. The umbrella/excess policy shall not require exhaustion of the underlying limits only through the actual payment by the underlying insurers.

§ 11.1.2 The Contractor shall provide surety bonds in the forms and subject to such terms and conditions as required by the Contract Documents, each for 100% of the Contract Sum. The Contractor shall purchase and maintain the

required bonds from a company or companies lawfully authorized to issue surety bonds in the jurisdiction where the Project is located with an AM Best Rating of "A-" or higher and a size category of IX or greater.

§ 11.1.3 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.

§ 11.1.4 Notice of Cancellation or Expiration of Contractor's Required Insurance. Within three (3) business days of the date the Contractor becomes aware of an impending or actual cancellation or expiration of any insurance required by the Contract Documents, the Contractor shall provide notice to the Owner of such impending or actual cancellation or expiration. Upon receipt of notice from the Contractor, the Owner shall, unless the lapse in coverage arises from an act or omission of the Owner, have the right to stop the Work until the lapse in coverage has been cured by the procurement of replacement coverage by the Contractor. The furnishing of notice by the Contractor shall not relieve the Contractor of any contractual obligation to provide any required coverage.

§ 11.2 Owner's Insurance

§ 11.2.1 The Owner shall purchase and maintain property insurance (builder's risk) for the Project.

§ 11.2.2 Failure to Purchase Required Property Insurance. If the Owner fails to purchase and maintain the required insurance, the Owner shall inform the Contractor in writing prior to commencement of the Work. Upon receipt of notice from the Owner, the Contractor may delay commencement of the Work and may obtain insurance that will protect the interests of the Contractor, Subcontractors, and Sub-Subcontractors in the Work. When the failure to provide coverage has been cured or resolved, the Contract Sum and Contract Time shall be equitably adjusted. In the event the Owner fails to procure coverage, the Owner waives all rights against the Contractor, Subcontractors, and Sub-subcontractors to the extent the loss to the Owner would have been covered by the insurance to have been procured by the Owner. The cost of the insurance shall be charged to the Owner by a Change Order. If the Owner does not provide written notice, and the Contractor is damaged by the failure or neglect of the Owner to purchase or maintain the required insurance, the Owner shall reimburse the Contractor for all reasonable costs and damages attributable thereto.

§ 11.2.2.1 The property insurance deductible is identified below and the Contractor responsible for the damage shall pay any costs not covered because of such deductibles. If the Owner or insurer increases the required minimum deductibles above the amount still identified or if the Owner elects to purchase this insurance with voluntary deductible amounts, the Owner shall be responsible for payment of the additional costs not covered because of such increase or voluntary deductibles. Notwithstanding the above, Contractor shall be responsible and shall pay costs not covered because of deductibles for loss or damages caused by Contractor's negligence.

- 1 The property insurance is written with a deductible of \$25,000 per occurrence.

§ 11.2.3 Notice of Cancellation or Expiration of Owner's Required Property Insurance. Within three (3) business days of the date the Owner becomes aware of an impending or actual cancellation or expiration of any property insurance required by the Contract Documents, the Owner shall provide notice to the Contractor of such impending or actual cancellation or expiration. Unless the lapse in coverage arises from an act or omission of the Contractor: (1) the Contractor, upon receipt of notice from the Owner, shall have the right to stop the Work until the lapse in coverage has been cured by the procurement of replacement coverage by either the Owner or the Contractor; (2) the Contract Time and Contract Sum shall be equitably adjusted; and (3) the Owner waives all rights against the Contractor, Subcontractors, and Sub-subcontractors to the extent any loss to the Owner would have been covered by the insurance had it not expired or been cancelled. If the Contractor purchases replacement coverage, the cost of the insurance shall be charged to the Owner by an appropriate Change Order. The furnishing of notice by the Owner shall not relieve the Owner of any contractual obligation to provide required insurance.

§ 11.3 Waivers of Subrogation

§ 11.3.1 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; (2) the Architect and Architect's consultants; and (3) Separate Contractors, 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 those losses are covered by property insurance required by the Agreement or other property insurance applicable to the Project, except such rights as they have to proceeds of such

insurance. The Owner or Contractor, as appropriate, shall require similar written waivers in favor of the individuals and entities identified above from the Architect, Architect's consultants, Separate Contractors, subcontractors, and sub-subcontractors. The policies of insurance purchased and maintained by each person or entity agreeing to waive claims pursuant to this section 11.3.1 shall not prohibit this waiver of subrogation. This waiver of subrogation shall be effective as to a person or entity (1) even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise, (2) even though that person or entity did not pay the insurance premium directly or indirectly, or (3) whether or not the person or entity had an insurable interest in the damaged property.

§ 11.3.2 If during the Project construction period the Owner insures properties, real or personal or both, at 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, to the extent permissible by such policies, the Owner waives all rights in accordance with the terms of Section 11.3.1 for damages caused by fire or other causes of loss covered by this separate property insurance.

§ 11.4 Loss of Use, Business Interruption, and Delay in Completion Insurance

The Owner, at the Owner's option, may purchase and maintain insurance that will protect the Owner against loss of use of the Owner's property, or the inability to conduct normal operations, due to fire or other causes of loss. The Owner waives all rights of action against the Contractor and Architect for loss of use of the Owner's property, due to fire or other hazards however caused.

§11.5 Adjustment and Settlement of Insured Loss

§ 11.5.1 A loss insured under the property insurance required by the Agreement shall be adjusted by the Owner 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 11.5.2. The Owner shall pay the Architect and Contractor their just shares of insurance proceeds received by the Owner, and by appropriate agreements the Architect and Contractor shall make payments to their consultants and Subcontractors in similar manner.

§ 11.5.2 Prior to settlement of an insured loss, the Owner shall notify the Contractor of the terms of the proposed settlement as well as the proposed allocation of the insurance proceeds. The Contractor shall have 14 days from receipt of notice to object to the proposed settlement or allocation of the proceeds. If the Contractor does not object, the Owner shall settle the loss and the Contractor shall be bound by the settlement and allocation. Upon receipt, the Owner shall deposit the insurance proceeds in a separate account and make the appropriate distributions. Thereafter, if no other agreement is made or the Owner does not terminate the Contract for convenience, the Owner and Contractor shall execute a Change Order for reconstruction of the damaged or destroyed Work in the amount allocated for that purpose. If the Contractor timely objects to either the terms of the proposed settlement or the allocation of the proceeds, the Owner may proceed to settle the insured loss, and any dispute between the Owner and Contractor arising out of the settlement or allocation of the proceeds shall be resolved pursuant to Article 15. Pending resolution of any dispute, the Owner may issue a Construction Change Directive for the reconstruction of the damaged or destroyed Work.

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 Architect's request or to requirements specifically expressed in the Contract Documents, it must, if requested in writing by the Architect, be uncovered for the Architect's examination and be replaced at the Contractor's expense without change in the Contract Time.

§ 12.1.2 If a portion of the Work has been covered that the Architect has not specifically requested to examine prior to its being covered, the Architect may request to see such Work and it shall be uncovered by the Contractor. If such Work is in accordance with the Contract Documents, the Contractor shall be entitled to an equitable adjustment to the Contract Sum and Contract Time as may be appropriate. If such Work is not in accordance with the Contract Documents, the costs of uncovering the Work, and the cost of correction, shall be at the Contractor's expense.

§ 12.2 Correction of Work

§ 12.2.1 Before Substantial Completion

The Contractor shall promptly correct Work rejected by the Architect or failing to conform to the requirements of the Contract Documents, discovered before 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 Architect's services and expenses made necessary thereby, shall be at the Contractor's expense.

§ 12.2.1.2 It shall be clearly understood that "Punch List" items and "Maintenance" items are different categories. All items called for by the Contract Documents to be installed, supplied or otherwise incorporated into the Project, but which, at the time of inspection, are found not to be in compliance with the Contract Documents, shall be considered punch list items. All items which, at any time after completion inspection, are found not to be in compliance with the Contract Documents, shall be considered maintenance items to be corrected by the Contractor under the one-year warranty terms of the Contract so as long as the Contractor has supplied the Owner with all required O& M manuals necessary for the Owner to perform its maintenance

§ 12.2.2 After Substantial Completion

§ 12.2.2.1 In addition to the Contractor's obligations under Section 3.5, if, within one year after the date of Substantial Completion of the Work or by terms of any 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 correct it promptly after receipt of 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 2.5.

§ 12.2.2.2 The one-year period for correction of Work 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.

§ 12.2.2.3 An additional one-year period for correction of Work shall apply to any corrective Work performed by the Contractor pursuant to this Section 12.2.

§ 12.2.2.4 This obligation under this Subparagraph 12.2.2 shall survive acceptance of the Work under the Contract and termination of the Contract. Nothing contained in this paragraph shall decrease the liability of Contractor and/or Surety as set forth in the Performance Bond.

§ 12.2.3 The Contractor shall remove from the 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.

§ 12.2.3.1 If the Contractor fails to correct non-conforming Work, the Owner may correct it in accordance with Paragraph 2.5. If the Contractor does not proceed with correction of such non-conforming Work within time required by Paragraph 2.5, then the Owner may remove it and, if appropriate under the circumstances, 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 days' after written notice, the Owner may sell such materials and equipment at auction or at private sale and shall account for the proceeds thereof, after deducting costs and damages that should have been borne by the Contractor, including compensation for the Architect's services and expenses made necessary thereby. If such proceeds of sale do not cover costs which the Contractor should have borne, the Contract Sum shall be reduced by the deficiency. If payments entered thereafter due the Contractor are not sufficient to cover such amount, the Contractor shall pay the difference due the Owner.

§ 12.2.4 The Contractor shall bear the cost of correcting destroyed or damaged construction of the Owner or Separate Contractors, whether completed or partially completed, 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 under the Contract Documents. Establishment of the one-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.

§ 12.3 Acceptance of Nonconforming Work

If the Owner prefers to accept Work that is not in accordance with the requirements of the Contract Documents, the Owner may do so instead of requiring its removal and correction, in which case the Contract Sum will be reduced as appropriate and equitable. Such adjustment shall be effected whether or not final payment has been made.

ARTICLE 13 MISCELLANEOUS PROVISIONS

§ 13.1 Governing Law

The Contract shall be governed by the law of the place where the Project is located, excluding that jurisdiction's choice of law rules. If the parties have selected arbitration as the method of binding dispute resolution, the Federal Arbitration Act shall govern Section 15.4.

§ 13.1.1 The Contract shall be governed by the law of the Commonwealth of Pennsylvania.

§ 13.1.2 DISCRIMINATION PROHIBITED: According to Section 62 Pa. C.S.A. § 3701, the Contractor agrees that:

§ 13.1.2.1 In the hiring of employees for the performance of Work under this Contract, or any sub-contract, no Contractor, Subcontractor, or any person acting on behalf of the Contractor or Subcontractor shall, by reason of gender, race, creed or color, discriminate against any citizen of this Commonwealth who is qualified and available to perform the Work to which the employment relates.

§ 13.1.2.2 No Contractor, Subcontractor, or any person acting on their behalf, shall in any manner discriminate against or intimidate any employee hired for the performance of Work under this Contract on account of gender, race, creed or color.

§ 13.1.2.3 The Contract may be canceled or terminated by the government agency, and all money due or to become due under the Contract may be forfeited, for violation of the terms or conditions of that portion of the Contract.

§13.1.3 HUMAN RELATIONS ACT

§13.1.3.1 The provisions of the Pennsylvania Human Relations Act, Act 222 of October 27, 1955 (P.L. 744) (43 P.S. Section 951, et seq.) of the Commonwealth of Pennsylvania prohibit discrimination because of race, color, religious creed, ancestry, age, sex, national origin, handicap or disability by employers, employment agencies, labor organizations, Contractors and others. The Contractor shall agree to comply with the provisions of this Act as amended that is made part of this specification. Your attention is directed to the language of the Commonwealth's non-discrimination clause in 16 PA. Code 49.101.

§13.1.4 PROVISION FOR THE USE OF STEEL AND STEEL PRODUCTS MADE IN THE U.S.

§13.1.4.1 In accordance with Act 3 of the 1978 General Assembly of the Commonwealth of Pennsylvania, if any steel or steel products are to be used or supplied in the performance of the Contract, only those produced in the United States as defined therein shall be used or supplied in the performance of the Contract or any Subcontracts there under.

§13.1.4.2 In accordance with Act 161 of 1982, cast iron products shall also be included and produced in the United States. Act 144 of 1984 further defines "steel product" to include machinery and equipment. The act also provides clarifications and penalties.

§ 13.1.5 NO CASH ALLOWANCES

§13.1.5.1 Cash allowances are not included in these bid specifications.

§ 13.1.6 RIGHT TO KNOW ACT

§13.1.6.1 Contractor shall comply with all terms and conditions of the Pennsylvania Right to Know Act, Act No. 159 of 1984, 35 P.S. §7301 et. Seq., and its implementing regulations.

§13.1.7 INTENTIONALLY DELETED – See §3.4.4

§13.1.8 INTENTIONALLY DELETED – See §3.4.4

§13.1.9 BLASTING

§13.1.9.1 When blasting has been authorized in writing, comply with the following: All storage, handling and use of explosives for the purpose of excavation shall be performed by the Contractor in strict accordance with Title 25, Chapter 211, of the Pennsylvania Code, as well as any applicable local regulations. Strict control of blasting must be maintained to prevent fly rock and blasting mats must be used where conditions dictate their use. When blasting within 25 feet of utility lines, such blasting must be performed according to Section 211.52 of Title 25 of the Pennsylvania Code.

§13.1.10 SITE EXCAVATION

§13.1.10.1 Contractor agrees that, not less than three (3) business days or for complex projects, ten business days, prior to beginning excavation or demolition Work as defined in Act 181 of December 2006 of the Commonwealth of Pennsylvania, amending Act 287 of December 10, 1974, he shall contact the One Call System at 811 or 1-800-242-1776 and request the information required by Section 5 of the Act and shall inform each excavator employed at the Project site of the information received with respect to location of underground installations. Contractor shall agree to report immediately to the user of the underground installations and to the Owner and Architect, any break in its lines, or dent, gouge, groove or other damage to such lines, their coating or cathodic protection, made or discovered in the course of the excavation or demolition Work. Contractor shall comply with all other provisions of the Act, as amended including conducting pre-construction meeting when necessary and paying all associated fees.

§13.1.11 PREVENTION OF ENVIRONMENTAL POLLUTION

§13.1.11.1 Section 3301 of the Pennsylvania Commonwealth Procurement Code requires that all Invitations for Bids and requests for proposals for construction projects issued by any governmental agencies shall set forth any provision of Federal and State statutes, rules, and regulations dealing with prevention of environmental pollution and the preservation of public natural resources that affect the Project. In this regard, a Notice of said provisions prepared by the Pennsylvania Department of Environmental Resources under subsection 4.10 of the Code can be viewed at: <http://www.depweb.state.pa.us/oa/cwp/view.asp?a=1365&Q=482058&oaNav=324#410>

Contractor is hereby notified and agrees to comply with the terms of all statutes, rules and regulations enumerated in said Notice. Where any identified environmental statute, rule and/or regulation, has been revised, amended, supplemented, repealed and/or supplanted, Contractor shall comply with such statute, rule and/or regulation as so modified. Notwithstanding the foregoing, failure to include any applicable environmental statute, rule and/or regulation shall not relieve Contractor of its obligation to comply with same.

§ 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 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 the assignment.

§ 13.3 Rights and Remedies

§ 13.3.1 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.

§ 13.3.2 No action or failure to act by the Owner, 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 of or acquiescence in a breach thereunder, except as may be specifically agreed upon in writing.

§ 13.4 Tests and Inspections

§ 13.4.1 Tests, inspections, and approvals of portions of the Work shall be made as required by the Contract Documents and by applicable laws, statutes, ordinances, codes, rules, and regulations or lawful orders of public authorities. The Contractor shall make arrangements for such tests, inspections, and approvals with an independent testing laboratory or entity contracted by the Owner directly. Electric Contract is the one exception that will hire a third party Underwriter for the electrical inspections as part of their Contract. The Contractor shall give the Architect timely notice of when and where tests and inspections are to be made so that the Architect may be present for such procedures.

§ 13.4.2 If the Architect, Owner, or public authorities having jurisdiction determine that portions of the Work require additional testing, inspection, or approval not included under Section 13.4.1, the 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 Architect of when and where tests and inspections are to be made so that the Architect may be present for such procedures. Such costs, except as provided in Section 13.4.3, shall be at the Owner's expense.

§ 13.4.3 If procedures for testing, inspection, or approval under Sections 13.4.1 and 13.4.2 reveal failure of the portions of the Work to comply with requirements established by the Contract Documents, all costs made necessary by such failure, including those of repeated procedures and compensation for the Architect's services and expenses, shall be at the Contractor's expense.

§ 13.4.4 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 Architect.

§ 13.4.5 If the Architect is to observe tests, inspections, or approvals required by the Contract Documents, the Architect will do so promptly and, where practicable, at the normal place of testing.

§ 13.4.6 Tests or inspections conducted pursuant to the Contract Documents shall be made promptly to avoid unreasonable delay in the Work.

§ 13.5 Interest

Payments due and unpaid under the Contract Documents shall bear interest from the date payment is due at the rate the parties 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.

§ 13.5.1 Progress payments due and unpaid under the Contract Documents shall bear interest from the date payment is due at the rate of 3% per annum, simple interest. Interest on final payment shall be governed by Section 3941 of the Pennsylvania Commonwealth Procurement Act, 62 Pa.C.S. § 3941.

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 90 consecutive days through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, their agents or employees, or any other persons or entities performing portions of the Work, 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 Architect has not issued a Certificate for Payment and has not notified the Contractor of the reason for withholding certification as provided in Section 9.4.1, or because the Owner has not made payment on a Certificate for Payment within the time stated in the Contract

§ 14.1.2 The Contractor may terminate the Contract if, through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, their agents or employees, or any other persons or entities performing portions of the Work, 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 30 days' notice to the Owner and Architect, terminate the Contract and recover from the Owner payment for Work executed and costs incurred by reason of such termination.

§ 14.1.4 If the Work is stopped for a period of 60 consecutive days through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, or their agents or employees or any other persons or entities performing portions of the Work 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 seven additional days' notice to the Owner and the 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;
- .2 fails to make payment to Subcontractors or suppliers in accordance with the respective agreements between the Contractor and the Subcontractors or suppliers;
- .3 repeatedly disregards applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of a public authority; or
- .4 fails to comply with one or more Milestone Date, Completion Dates,
- .5 otherwise is guilty of material breach of a provision of the Contract Documents,
- .6 is adjudged bankrupt or files for bankruptcy or creditor protection under the laws of this United States, Contractor shall provide Owner with thirty (30) days' written notice before filing.

§ 14.2.2 When any of the reasons described in Section 14.2.1 exist, the Owner may, without prejudice to any other rights or remedies of the Owner and after giving the Contractor and the Contractor's surety, if any, seven days' notice, terminate employment of the Contractor and may, subject to any prior rights of the surety:

- .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.

§ 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. If the Owner terminates the Contract for one of the reasons stated in Section 14.2.1 and it is later finally determined that cause for termination did not exist, then the Contractor shall be entitled to recover damages as set forth in Section 14.1.3.

§ 14.2.4 If the unpaid balance of the Contract Sum exceeds costs of finishing the Work, including compensation for the Architect's services and expenses made necessary thereby, and other damages incurred by the Owner 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 be certified by the Initial Decision Maker, upon application, and this obligation for payment shall survive termination of the Contract.

§ 14.2.5 In the event the Owner terminates the Contract for cause, and such cause is determined to be valid and justified in addition and without prejudice to all other rights, remedies and relief which the Owner may obtain under this Agreement and pursuant to the law, the Owner shall be entitled to payment by Contractor of all reasonable professional fees, including attorneys' fees, architectural fees, engineering fees, expert witness fees and consulting fees (together with reasonable expenses and disbursements incurred in connection therewith) which the Owner may incur in connection with any legal proceedings or action (including professional fees rendered in anticipation of such proceedings or action). This provision shall create no rights to the Contractor or to any other person or entity for payment of such costs or expenses.

§ 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 Contract Time shall be adjusted for increases in the cost and time caused by suspension, delay, or interruption under Section 14.3.1. 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 the 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 termination or suspension 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 suspension or termination stated in the Notice, suspend or terminate as the case may be, 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 from the Owner for any work properly completed prior to the notice of termination, any work properly performed to protect the Work, and any reasonable termination costs incurred with respect to subcontracts and suppliers, provided that no allowance will be made for overhead and profit on any work not satisfactorily performed. The Contractor will fully cooperate with the Owner in ensuring that terminations of subcontracts and supply contracts are done in a reasonable and prudent manner so as not to waste resources and to minimize such termination costs.

ARTICLE 15 CLAIMS AND DISPUTES

§ 15.1 Claims

§ 15.1.1 Definition

A Claim is a demand or assertion by the Contractor seeking, as a matter of right, payment of money, a change in the Contract Time, or other relief with respect to the terms of the Contract. The responsibility to substantiate Claims shall rest with the Contractor.

§ 15.1.2 Time Limits on Claims

The Contractor must initiate a Claim by written notice to the Owner and the Owner's Representative with a copy to the Architect as set forth in paragraph 15.1.3.

§ 15.1.3 Notice of Claims

§ 15.1.3.1 Claims by the Contractor shall be initiated by notice to the Owner, and to the Initial Decision Maker with a copy sent to the Architect, if the Architect is not serving as the Initial Decision Maker. Claims by the Contractor under this Section 15.1.3.1 shall be initiated within 10 days after occurrence of the event giving rise to such Claim or within 10 days after the Contractor first recognizes the condition giving rise to the Claim, whichever is later. An additional claim made after the initial claim has been implemented by Change Order will not be considered unless submitted in a timely manner.

§ 15.1.3.2 Any Claims not raised by the Contractor in accordance with these provisions shall be deemed waived.

§ 15.1.4 Continuing Contract Performance

§ 15.1.4.1 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.

§ 15.1.4.2 The Contract Sum and Contract Time shall be adjusted in accordance with the Initial Decision Maker's decision, subject to the right of either party to proceed in accordance with this Article 15. The Architect will issue Certificates for Payment in accordance with the decision of the Initial Decision Maker.

§ 15.1.5 Claims for Additional Cost

If the Contractor wishes to make a Claim for an increase in the Contract Sum, notice as provided in Section 15.1.3 shall be given before proceeding to execute the portion of the Work that is the subject of the Claim. Prior notice is not required for Claims relating to an emergency endangering life or property arising under Section 10.4.

§ 15.1.6 Claims for Additional Time

§ 15.1.6.1 If the Contractor wishes to make a Claim for an increase in the Contract Time, notice as provided in Section 15.1.3 shall be given. The Contractor's Claim shall include an estimate of the probable effect of delay on progress of the Work. In the case of a continuing delay, only one Claim is necessary the extension of time is the sole recourse.

§ 15.1.6.2 If adverse weather conditions are the basis for a Claim for additional time, such Claim shall be 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. No extension of time shall be granted because of seasonal variations in temperature, humidity or precipitation, which conditions shall be wholly at the risk of the Contractor, whether occurring within the time originally scheduled for completion or within the period of any extension granted. Any additional costs of operations or conditions shall be the responsibility of the Contractor.

§ 15.1.7 Waiver of Claims for Consequential Damages

Contractor waives claims against Owner for consequential damages arising out of or relating to this
(Paragraphs deleted)

Contract, including, but not limited to, 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.

§ 15.2 Initial Decision

§ 15.2.1 Claims shall be referred to the Initial Decision Maker for initial decision. The Owner's Representative 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 further dispute resolution of any Claim. If an initial decision has not been rendered within 30 days after the Claim has been referred to the Initial Decision Maker, the Contractor may request that the Owner permit the matter to proceed to mediation, arbitration or litigation without a 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 Contractor or a response with supporting data from the Owner, (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 the 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, if the Architect is not serving as the Initial Decision Maker, of any change in the Contract Sum or Contract Time or both. The initial decision shall be final and binding on the Contractor unless the Contractor provides written notice to the Owner, the Initial Decision Maker and the Architect

that the Contractor rejects the initial decision within 15 days of the Contractor's receipt of the initial decision, in which case, the Claim will be resolved in accordance with the Mediation, Arbitration, or Litigation provisions of this Contract. The initial decision will be binding on the Owner unless the Owner notifies the Contractor and the Architect in writing within thirty (30) days of the Owner's receipt of the initial decision that the Owner rejects the initial decision and the bases for such rejection. .

§ 15.2.6 Intentionally deleted.

(Paragraph deleted)

§ 15.2.7 Intentionally deleted.

§ 15.2.8 Intentionally deleted. .

§ 15.3 Mediation

(Paragraph deleted)

§ 15.3. The Owner shall have the sole and exclusive option to serve a written demand upon the Contractor for mediation, in which case, the parties will attempt to resolve such dispute by mediation under the Construction Industry Mediation Rules of the American Arbitration Association then in effect, before resorting to any other arbitration or judicial proceedings. Nothing contained in this paragraph is intended, or shall be construed, to entitle the Contractor to demand mediation, it being understood and agreed that such determination shall be at the sole election of the Owner.

§ 15.3.2 Unless otherwise mutually agreed in writing, the Contractor shall carry on with its duties and services under the Contract for Construction during any mediation proceedings, and the Owner shall continue to make payments to the Contractor in accordance with the Contract for Construction.

§ 15.3.3 Intentionally deleted.

§ 15.3.4 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 The Owner shall have the sole and exclusive option to have all claims, disputes and other matters in question between the Contractor and the Owner arising out of, or relating to, the Contract for Construction or the breach thereof be decided by arbitration in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association then in effect. The Owner's election to arbitrate shall be specifically enforceable under the prevailing arbitration law. The award rendered by the arbitrators shall be final, and judgment may be entered upon it in accordance with applicable law in any court having jurisdiction thereof. Nothing contained in this paragraph is intended, or shall be construed, to entitle the Contractor to demand arbitration, it being understood and agreed that such determination shall be at the sole election of the Owner.

(Paragraph deleted)

§ 15.4.2 If the Owner elects arbitration, then Notice of the Demand for Arbitration shall be filed in writing with the Contractor and with the American Arbitration Association.

§ 15.4.3 Unless otherwise mutually agreed in writing, the Contractor shall carry on with its duties and services under the Contract for Construction during any arbitration proceedings, and the Owner shall continue to make payments to the Contractor in accordance with the Contract for Construction.

§ 15.4.4 If the Owner becomes a party to any arbitration with the: (a) the Architect, whether as a claimant or respondent, which involves a common question of fact or law with any claim, dispute or other matter in question between the Owner and the Contractor arising out of or relating to the Contract for Construction or the breach thereof; or (b) one or more separate contractors, whether as claimant or respondent, which involves a common question of fact or law with any claim, dispute or other matter in question between the Owner and the Contractor arising out of or relating to the Contract for Construction or the breach thereof, then the Owner, if it elects to do so, may require: (1) the Contractor to arbitrate such claim, dispute or other matter in question in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association then in effect; (2) the Architect or the separate

contractor(s), or all of them, to arbitrate such claim, dispute or other matter in question in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association then in effect; and (3) that all such claims be heard in a single arbitration proceeding or that any separate arbitration proceedings involving such claims be consolidated.

(Paragraphs deleted)

§ 15.5 Litigation

§ 15.5 Any disputes not resolve by Mediation and any disputes that the Owner does not elect to refer to mediation or arbitration shall be resolved through litigation in the Delaware County Court of Common Pleas. The Contractor agrees that it will waive the right to a trial by jury if the Owner elects to waive that right. In any such litigation, to the extent that the Owner substantially prevails on any claim or on defense of any claim, it shall be entitled to an award of attorney's fees and costs, including, but not limited to expert witness and consultant fees, associated with the claim or defense upon which the Owner substantially prevailed.

§ 15.6 The Owner's Election

§ 15.6.1 The Owner may elect mediation at any time, regardless of whether arbitration or judicial proceedings have been commenced, and the Owner's commencement of or participation in such arbitration or judicial proceedings shall not waive the Owner's right to later elect mediation.

§ 15.6.2 The Owner may elect arbitration at any time, regardless of whether the Owner has previously elected mediation or whether judicial proceedings have been commenced, and the Owner's commencement of or participation in such mediation or judicial proceedings shall not waive the Owner's right to later elect arbitration.

§ 15.6.3 The Contractor may not commence any judicial proceedings against the Owner without first offering the Owner the opportunity to initially elect mediation or arbitration by notifying the Owner in writing of the nature of the dispute, the factual basis for its claims, and the amount or other relief claimed. If the Owner does not make its election within thirty (30) days after such notice, the Contractor may proceed to resolve such dispute through judicial proceedings. The Owner's failure to elect mediation or arbitration within such thirty (30) day period shall not, however, waive the Owner's right to later elect mediation or arbitration. The Owner may elect mediation and if no settlement is reached, thereafter elect arbitration or litigation.

§ 15.6.4 The Owner shall have the right to elect mediation and/or arbitration with the Contractor's Surety under the surety bonds to the same extent and in the same manner as the Owner's right to so elect with the Contractor under this Article 15. The Surety shall be bound by the terms of this Article 15 with respect to any mediation or arbitration elected by the Owner under the surety bonds and shall assume toward the Owner all of the duties, obligations and responsibilities which the Contractor assumes toward the Owner under this Article 15 in the event of such an election. Any separate bond defenses or claims raised by the Surety may, at the Owner's election, be made part of such mediation or arbitration.

§ 15.7 Nullum Tempus

The Contractor acknowledges that the Project involves construction of a public school for a Pennsylvania public school district; therefore, the doctrine of *nullum tempus occurit regi* applies to any claims that the Owner may have against the Contractor relating to the Contractor's performance of the Work.

SECTION 000900 - PREVAILING MINIMUM WAGE PRE-DETERMINATION

- 1.1 The provisions of the Pennsylvania Prevailing Wage Act, Act. No. 442, approved August 15, 1961 (P.L. 987) as amended are hereby incorporated herein, and Contractor and all subcontractors shall comply with the requirements of the applicable portions thereof and the regulations issued in connection therewith.
- 1.2 Pursuant to the requirements of the above Act, the Prevailing Minimum Wage Predetermination is attached hereto and hereby made part of the Contract Documents.
- 1.3 All prime contractors shall submit (3) copies of weekly certification forms with their payment requisitions. The form to be used is the latest edition of the Department of Labor and Industry form "Contractor's or Subcontractor's Weekly Payroll Certification for Public Works Projects" (forms LIPW-123 and LIPW-124).
- 1.4 There shall be paid each laborer or mechanic of Contractor or Subcontractor engaged in Work on the Project, in the trade or occupation listed on the attached Prevailing Minimum Wage Predetermination, not less than the hourly wage rate set opposite the same, regardless of any contractual relationship which may be alleged to exist between Contractor or any subcontractor, and such laborers and mechanics.
- 1.5 Each prime contractor or subcontractor shall post the general prevailing minimum wage rates for each craft and classification involved, as determined by the Secretary of the Department of Labor and Industry, including the effective date of any changes thereof, in prominent and easily accessible places at the site of the Work, or at such place or places as are used by them to pay the workmen their wages.
- 1.6 Each prime contractor or subcontractor shall keep an accurate record showing the name, craft and the actual hourly rate of wage paid to each workman employed by them and such record shall be preserved for two years from the date of payment. The record shall be open at all reasonable hours to the inspection of the public body awarding the Contract and to the Secretary of the Department of Labor and Industry.
- 1.7 Before final payment is made of any sum or sums due on Project, all contractors and subcontractors shall file statements, in writing, in a form satisfactory to the Secretary of the Department of Labor and Industry, certifying to the amounts then due and owing from such contractor or subcontractor filing such to any or all workmen for wages due to each respectively, which statement shall be verified by the oath of Contractor or subcontractor as the case may be, that they have read such statement subscribed by them, knows the contents thereof, and that the same is true of their own knowledge; provided, nevertheless, that nothing contained herein shall impair the right of a contractor to receive final payment because of the failure of any subcontractor to comply with the provisions of Act No. 442, effective February 1, 1961, as amended by Act No. 342, approved August 9, 1963.
- 1.8 Any contractor or subcontractor who shall, under oath, verify the statement required to be filed as indicated above, which is known to them to be false, shall be guilty of a misdemeanor, and shall, upon conviction, be sentenced to pay a fine of not exceeding two thousand five hundred dollars (\$2,500.00) or to undergo imprisonment not exceeding five (5) years, or both.

END OF SECTION 000900

**BUREAU OF LABOR LAW COMPLIANCE
PREVAILING WAGES PROJECT RATES**

Project Name:	Coopertown Elementary School
General Description:	Additions and Renovations
Project Locality	800 Coopertown Road, Bryn Mawr
Awarding Agency:	School District of Haverford Township
Contract Award Date:	4/24/2025
Serial Number:	25-02442
Project Classification:	Building
Determination Date:	3/6/2025
Assigned Field Office:	Philadelphia
Field Office Phone Number:	(215)560-1858
Toll Free Phone Number:	
Project County:	Delaware County

BUREAU OF LABOR LAW COMPLIANCE PREVAILING WAGES PROJECT RATES

Project: 25-02442 - Building	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Asbestos & Insulation Workers	6/1/2023		\$57.84	\$43.36	\$101.20
Asbestos & Insulation Workers	5/1/2024		\$59.37	\$46.03	\$105.40
Boilermaker (Commercial, Institutional, and Minor Repair Work)	3/1/2024		\$36.71	\$19.13	\$55.84
Boilermakers	1/1/2023		\$51.27	\$35.30	\$86.57
Boilermakers	1/1/2024		\$52.10	\$35.72	\$87.82
Bricklayer	5/1/2023		\$47.50	\$31.42	\$78.92
Carpenter - Chief of Party (Surveying & Layout)	5/1/2023		\$50.57	\$29.02	\$79.59
Carpenter - Chief of Party (Surveying & Layout)	5/1/2024		\$52.58	\$29.02	\$81.60
Carpenter - Chief of Party (Surveying & Layout)	5/1/2025		\$54.59	\$29.02	\$83.61
Carpenter - Instrument Person (Surveying & Layout)	5/1/2023		\$43.97	\$29.02	\$72.99
Carpenter - Instrument Person (Surveying & Layout)	5/1/2024		\$45.72	\$29.02	\$74.74
Carpenter - Instrument Person (Surveying & Layout)	5/1/2025		\$47.47	\$29.02	\$76.49
Carpenter - Rodman (Surveying & Layout)	5/1/2023		\$21.99	\$20.62	\$42.61
Carpenter - Rodman (Surveying & Layout)	5/1/2024		\$22.86	\$20.62	\$43.48
Carpenter - Rodman (Surveying & Layout)	5/1/2025		\$23.74	\$20.62	\$44.36
Carpenters	5/1/2023		\$43.97	\$29.02	\$72.99
Carpenters	5/1/2024		\$45.72	\$29.02	\$74.74
Carpenters	5/1/2025		\$47.47	\$29.02	\$76.49
Cement Finishers & Plasterers	5/1/2022		\$38.57	\$32.39	\$70.96
Cement Masons	5/1/2023		\$44.20	\$32.96	\$77.16
Cement Masons	5/1/2024		\$46.70	\$32.46	\$79.16
Dockbuilder, Pile Drivers	5/1/2023		\$50.48	\$37.99	\$88.47
Dockbuilder, Pile Drivers	5/1/2024		\$52.98	\$37.99	\$90.97
Dockbuilder, Pile Drivers	5/1/2025		\$55.23	\$37.99	\$93.22
Dockbuilder, Pile Drivers	5/1/2026		\$56.98	\$37.99	\$94.97
Dockbuilder/Pile Driver Diver	5/1/2023		\$58.41	\$41.74	\$100.15
Dockbuilder/Pile Driver Diver	5/1/2024		\$61.54	\$41.74	\$103.28
Dockbuilder/Pile Driver Diver	5/1/2025		\$64.35	\$41.74	\$106.09
Dockbuilder/Pile Driver Diver	5/1/2026		\$66.54	\$41.74	\$108.28
Dockbuilder/pile driver tender	5/1/2023		\$50.48	\$37.99	\$88.47
Dockbuilder/pile driver tender	5/1/2024		\$52.98	\$37.99	\$90.97
Dockbuilder/pile driver tender	5/1/2025		\$55.23	\$37.99	\$93.22
Dockbuilder/pile driver tender	5/1/2026		\$56.98	\$37.99	\$94.97
Drywall Finisher	5/1/2023		\$38.77	\$31.12	\$69.89
Drywall Finisher	5/1/2024		\$42.25	\$32.56	\$74.81
Electricians	5/1/2023		\$68.18	\$42.97	\$111.15
Electricians	5/1/2024		\$69.58	\$45.66	\$115.24
Elevator Constructor	1/1/2023		\$66.21	\$43.64	\$109.85
Elevator Constructor	1/1/2024		\$68.97	\$44.70	\$113.67
Elevator Constructor	1/1/2025		\$71.85	\$45.77	\$117.62
Floor Coverer	5/1/2023		\$50.12	\$29.21	\$79.33
Floor Coverer	5/1/2024		\$52.19	\$29.21	\$81.40
Glazier	5/1/2023		\$46.68	\$36.62	\$83.30
Glazier	5/1/2024		\$48.00	\$37.50	\$85.50

BUREAU OF LABOR LAW COMPLIANCE PREVAILING WAGES PROJECT RATES

Project: 25-02442 - Building	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Interior Finish	5/1/2023		\$34.60	\$25.80	\$60.40
Iron Workers (Bridge, Structural, Ornamental, Precast)	1/1/2023		\$50.70	\$39.51	\$90.21
Iron Workers (Bridge, Structural, Ornamental, Precast)	7/1/2024		\$53.20	\$45.01	\$98.21
Iron Workers (Riggers)	7/1/2023		\$42.53	\$34.14	\$76.67
Iron Workers (Riggers)	7/1/2024		\$44.64	\$34.39	\$79.03
Iron Workers (Rodman/Reinforcing)	7/1/2023		\$45.70	\$34.77	\$80.47
Iron Workers (Rodman/Reinforcing)	7/1/2024		\$47.70	\$34.77	\$82.47
Laborers (Class 01 - See notes)	5/1/2022		\$33.35	\$25.65	\$59.00
Laborers (Class 01 - See notes)	5/1/2023		\$34.60	\$25.80	\$60.40
Laborers (Class 01 - See notes)	5/1/2024		\$35.85	\$26.00	\$61.85
Laborers (Class 02 - See notes)	5/1/2022		\$36.70	\$27.00	\$63.70
Laborers (Class 02 - See notes)	5/1/2023		\$37.95	\$27.30	\$65.25
Laborers (Class 02 - See notes)	5/1/2024		\$39.40	\$27.55	\$66.95
Laborers (Class 03 - See notes)	5/1/2022		\$33.77	\$25.83	\$59.60
Laborers (Class 03 - See notes)	5/1/2023		\$35.02	\$25.98	\$61.00
Laborers (Class 03 - See notes)	5/1/2024		\$36.27	\$26.18	\$62.45
Laborers (Class 04 - See notes)	5/1/2022		\$33.77	\$25.83	\$59.60
Laborers (Class 04 - See notes)	5/1/2023		\$35.02	\$25.98	\$61.00
Laborers (Class 04 - See notes)	5/1/2024		\$36.27	\$26.18	\$62.45
Laborers (Class 05 - See notes)	5/1/2022		\$33.35	\$25.65	\$59.00
Laborers (Class 05 - See notes)	5/1/2023		\$34.60	\$25.50	\$60.10
Laborers (Class 05 - See notes)	5/1/2024		\$35.85	\$26.00	\$61.85
Landscape Laborer	5/1/2023		\$29.45	\$23.98	\$53.43
Landscape Laborer	5/1/2024		\$30.70	\$24.23	\$54.93
Marble Finisher	5/1/2022		\$38.27	\$29.15	\$67.42
Marble Finisher	5/1/2023		\$39.52	\$29.30	\$68.82
Marble Mason	5/1/2023		\$47.20	\$31.95	\$79.15
Mason Tender, Cement	5/1/2023		\$35.02	\$25.98	\$61.00
Millwright	5/1/2023		\$51.60	\$35.81	\$87.41
Millwright	5/1/2024		\$54.67	\$35.81	\$90.48
Millwright	5/1/2025		\$57.39	\$35.81	\$93.20
Millwright	5/1/2026		\$60.20	\$35.81	\$96.01
Operators (Building, Class 01 - See Notes)	5/1/2023		\$52.20	\$32.81	\$85.01
Operators (Building, Class 01 - See Notes)	5/1/2024		\$53.36	\$33.65	\$87.01
Operators (Building, Class 01 - See Notes)	5/1/2025		\$54.52	\$34.49	\$89.01
Operators (Building, Class 01 - See Notes)	5/1/2026		\$55.67	\$35.34	\$91.01
Operators (Building, Class 01A - See Notes)	5/1/2023		\$55.20	\$33.70	\$88.90
Operators (Building, Class 01A - See Notes)	5/1/2024		\$56.37	\$34.53	\$90.90
Operators (Building, Class 01A - See Notes)	5/1/2025		\$57.52	\$35.38	\$92.90
Operators (Building, Class 01A - See Notes)	5/1/2026		\$58.68	\$36.22	\$94.90
Operators (Building, Class 02 - See Notes)	5/1/2023		\$51.95	\$32.74	\$84.69
Operators (Building, Class 02 - See Notes)	5/1/2024		\$53.11	\$33.58	\$86.69
Operators (Building, Class 02 - See Notes)	5/1/2025		\$54.27	\$34.42	\$88.69
Operators (Building, Class 02 - See Notes)	5/1/2026		\$55.43	\$35.26	\$90.69

BUREAU OF LABOR LAW COMPLIANCE PREVAILING WAGES PROJECT RATES

Project: 25-02442 - Building	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Operators (Building, Class 02A - See Notes)	5/1/2023		\$54.97	\$33.61	\$88.58
Operators (Building, Class 02A - See Notes)	5/1/2024		\$56.13	\$34.45	\$90.58
Operators (Building, Class 02A - See Notes)	5/1/2025		\$57.29	\$35.29	\$92.58
Operators (Building, Class 02A - See Notes)	5/1/2026		\$58.44	\$36.14	\$94.58
Operators (Building, Class 03 - See Notes)	5/1/2023		\$47.87	\$31.53	\$79.40
Operators (Building, Class 03 - See Notes)	5/1/2024		\$49.03	\$32.37	\$81.40
Operators (Building, Class 03 - See Notes)	5/1/2025		\$50.18	\$33.22	\$83.40
Operators (Building, Class 03 - See Notes)	5/1/2026		\$51.34	\$34.06	\$85.40
Operators (Building, Class 04 - See Notes)	5/1/2023		\$47.57	\$31.44	\$79.01
Operators (Building, Class 04 - See Notes)	5/1/2024		\$48.73	\$32.28	\$81.01
Operators (Building, Class 04 - See Notes)	5/1/2025		\$49.88	\$33.13	\$83.01
Operators (Building, Class 04 - See Notes)	5/1/2026		\$51.04	\$33.97	\$85.01
Operators (Building, Class 05 - See Notes)	5/1/2023		\$45.85	\$30.93	\$76.78
Operators (Building, Class 05 - See Notes)	5/1/2024		\$47.00	\$31.78	\$78.78
Operators (Building, Class 05 - See Notes)	5/1/2025		\$48.16	\$32.62	\$80.78
Operators (Building, Class 05 - See Notes)	5/1/2026		\$49.32	\$33.46	\$82.78
Operators (Building, Class 06 - See Notes)	5/1/2023		\$44.85	\$30.65	\$75.50
Operators (Building, Class 06 - See Notes)	5/1/2024		\$46.02	\$31.48	\$77.50
Operators (Building, Class 06 - See Notes)	5/1/2025		\$47.17	\$32.33	\$79.50
Operators (Building, Class 06 - See Notes)	5/1/2026		\$48.34	\$33.16	\$81.50
Operators (Building, Class 07A- See Notes)	5/1/2023		\$63.33	\$37.68	\$101.01
Operators (Building, Class 07A- See Notes)	5/1/2024		\$64.80	\$38.61	\$103.41
Operators (Building, Class 07A- See Notes)	5/1/2025		\$66.26	\$39.55	\$105.81
Operators (Building, Class 07A- See Notes)	5/1/2026		\$67.73	\$40.48	\$108.21
Operators (Building, Class 07B- See Notes)	5/1/2023		\$63.04	\$37.59	\$100.63
Operators (Building, Class 07B- See Notes)	5/1/2024		\$64.50	\$38.53	\$103.03
Operators (Building, Class 07B- See Notes)	5/1/2025		\$65.97	\$39.46	\$105.43
Operators (Building, Class 07B- See Notes)	5/1/2026		\$67.44	\$40.39	\$107.83
Painters Class 1 (see notes)	5/1/2023		\$42.32	\$32.91	\$75.23
Painters Class 1 (see notes)	5/1/2024		\$42.97	\$34.11	\$77.08
Painters - Line Stripping	12/1/2024		\$44.12	\$27.91	\$72.03
Painters Class 4 (see notes)	5/1/2023		\$44.41	\$32.91	\$77.32
Painters Class 4 (see notes)	5/1/2024		\$45.06	\$34.11	\$79.17
Plasterers	5/1/2023		\$39.32	\$32.64	\$71.96
Plasterers	5/1/2024		\$39.88	\$33.08	\$72.96
plumber	5/1/2023		\$64.73	\$37.61	\$102.34
plumber	5/1/2024		\$67.53	\$38.31	\$105.84
Pointers, Caulkers, Cleaners	5/1/2023		\$48.80	\$30.70	\$79.50
Roofers (Composition)	5/1/2022		\$41.48	\$33.87	\$75.35
Roofers (Composition)	5/1/2024		\$44.13	\$34.77	\$78.90
Roofers (Shingle)	5/1/2023		\$32.85	\$22.10	\$54.95
Roofers (Shingle)	5/1/2024		\$34.35	\$22.20	\$56.55
Roofers (Slate & Tile)	5/1/2023		\$35.85	\$22.10	\$57.95
Roofers (Slate & Tile)	5/1/2024		\$37.35	\$22.20	\$59.55

**BUREAU OF LABOR LAW COMPLIANCE
PREVAILING WAGES PROJECT RATES**

Project: 25-02442 - Building	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Sheet Metal Workers	5/1/2023		\$57.31	\$48.97	\$106.28
Sheet Metal Workers	5/1/2024		\$59.22	\$50.56	\$109.78
Sign Makers and Hangars	7/15/2022		\$30.54	\$24.35	\$54.89
Sign Makers and Hangars	7/15/2023		\$31.76	\$24.63	\$56.39
Sign Makers and Hangars	7/15/2024		\$32.32	\$25.82	\$58.14
Sprinklerfitters	1/1/2023		\$62.23	\$31.99	\$94.22
Steamfitters	5/1/2023		\$67.37	\$41.99	\$109.36
Steamfitters	5/1/2024		\$70.32	\$43.09	\$113.41
Stone Masons	5/1/2022		\$45.90	\$31.20	\$77.10
Stone Masons	5/1/2023		\$47.20	\$31.95	\$79.15
Terrazzo Finisher	5/1/2022		\$42.44	\$27.71	\$70.15
Terrazzo Finisher	5/1/2023		\$43.75	\$27.86	\$71.61
Terrazzo Grinder	5/1/2022		\$42.71	\$27.71	\$70.42
Terrazzo Grinder	5/1/2023		\$44.02	\$27.86	\$71.88
Terrazzo Mechanics	5/1/2022		\$48.81	\$29.46	\$78.27
Terrazzo Mechanics	5/1/2023		\$50.26	\$29.56	\$79.82
Tile Finisher	5/1/2022		\$38.27	\$29.15	\$67.42
Tile Finisher	5/1/2023		\$39.52	\$29.30	\$68.82
Tile Setter	5/1/2022		\$48.81	\$29.46	\$78.27
Tile Setter	5/1/2023		\$50.26	\$29.56	\$79.82
Truckdriver class 1(see notes)	5/1/2023		\$36.29	\$21.55	\$57.84
Truckdriver class 1(see notes)	5/1/2024		\$36.79	\$22.54	\$59.33
Truckdriver class 2 (see notes)	5/1/2023		\$36.39	\$21.55	\$57.94
Truckdriver class 2 (see notes)	5/1/2024		\$36.89	\$22.54	\$59.43
Window Film / Tint Installer	6/1/2019		\$24.52	\$12.08	\$36.60
Window Film / Tint Installer	6/1/2024		\$26.37	\$14.83	\$41.20

BUREAU OF LABOR LAW COMPLIANCE PREVAILING WAGES PROJECT RATES

Project: 25-02442 - Heavy/Highway	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Carpenter - Chief of Party (Surveying & Layout)	5/1/2023		\$63.24	\$29.06	\$92.30
Carpenter - Chief of Party (Surveying & Layout)	5/1/2024		\$65.19	\$29.06	\$94.25
Carpenter - Chief of Party (Surveying & Layout)	5/1/2025		\$67.15	\$29.06	\$96.21
Carpenter - Chief of Party (Surveying & Layout)	5/1/2026		\$69.10	\$29.06	\$98.16
Carpenter - Instrument Person (Surveying & Layout)	5/1/2023		\$54.99	\$29.06	\$84.05
Carpenter - Instrument Person (Surveying & Layout)	5/1/2024		\$56.69	\$29.06	\$85.75
Carpenter - Instrument Person (Surveying & Layout)	5/1/2025		\$58.39	\$29.06	\$87.45
Carpenter - Instrument Person (Surveying & Layout)	5/1/2026		\$60.09	\$29.06	\$89.15
Carpenter - Rodman (Surveying & Layout)	5/1/2023		\$43.99	\$22.41	\$66.40
Carpenter - Rodman (Surveying & Layout)	5/1/2024		\$45.35	\$22.41	\$67.76
Carpenter - Rodman (Surveying & Layout)	5/1/2025		\$46.71	\$22.41	\$69.12
Carpenter - Rodman (Surveying & Layout)	5/1/2026		\$48.07	\$22.41	\$70.48
Carpenter	5/1/2023		\$54.99	\$29.06	\$84.05
Carpenter	5/1/2024		\$56.69	\$29.06	\$85.75
Carpenter	5/1/2025		\$58.49	\$29.06	\$87.55
Carpenter	5/1/2026		\$60.19	\$29.06	\$89.25
Cement Masons	5/1/2023		\$43.20	\$32.91	\$76.11
Dockbuilder, Pile Drivers	5/1/2023		\$50.48	\$37.99	\$88.47
Dockbuilder, Pile Drivers	5/1/2024		\$52.98	\$37.99	\$90.97
Dockbuilder, Pile Drivers	5/1/2025		\$55.23	\$37.99	\$93.22
Dockbuilder, Pile Drivers	5/1/2026		\$56.98	\$37.99	\$94.97
Dockbuilder/Pile Driver Diver	5/1/2023		\$58.41	\$41.74	\$100.15
Dockbuilder/Pile Driver Diver	5/1/2024		\$61.54	\$41.74	\$103.28
Dockbuilder/Pile Driver Diver	5/1/2025		\$64.35	\$41.74	\$106.09
Dockbuilder/Pile Driver Diver	5/1/2026		\$66.54	\$41.74	\$108.28
Dockbuilder/pile driver tender	5/1/2023		\$50.48	\$37.99	\$88.47
Dockbuilder/pile driver tender	5/1/2024		\$52.98	\$37.99	\$90.97
Dockbuilder/pile driver tender	5/1/2025		\$55.23	\$37.99	\$93.22
Dockbuilder/pile driver tender	5/1/2026		\$56.98	\$37.99	\$94.97
Electric Lineman	5/29/2023		\$60.48	\$32.77	\$93.25
Electric Lineman	6/3/2024		\$62.07	\$33.96	\$96.03
Iron Workers (Bridge, Structural, Ornamental, Precast)	1/1/2023		\$50.70	\$39.51	\$90.21
Iron Workers (Bridge, Structural, Ornamental, Precast)	7/1/2024		\$53.20	\$45.01	\$98.21
Iron Workers (Riggers)	7/1/2023		\$42.53	\$34.14	\$76.67
Iron Workers (Rodman/Reinforcing)	7/1/2023		\$45.70	\$34.77	\$80.47
Laborers (Class 01 - See notes)	5/1/2022		\$36.30	\$27.20	\$63.50
Laborers (Class 01 - See notes)	5/1/2023		\$37.55	\$27.45	\$65.00
Laborers (Class 01 - See notes)	5/1/2024		\$38.80	\$27.65	\$66.45
Laborers (Class 02 - See notes)	5/1/2022		\$36.50	\$27.20	\$63.70
Laborers (Class 02 - See notes)	5/1/2023		\$37.75	\$27.45	\$65.20
Laborers (Class 02 - See notes)	5/1/2024		\$39.00	\$27.65	\$66.65
Laborers (Class 03 - See notes)	5/1/2022		\$36.50	\$27.20	\$63.70
Laborers (Class 03 - See notes)	5/1/2023		\$37.75	\$27.45	\$65.20
Laborers (Class 03 - See notes)	5/1/2024		\$39.00	\$27.65	\$66.65

BUREAU OF LABOR LAW COMPLIANCE PREVAILING WAGES PROJECT RATES

Project: 25-02442 - Heavy/Highway	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Laborers (Class 04 - See notes)	5/1/2022		\$31.10	\$27.20	\$58.30
Laborers (Class 04 - See notes)	5/1/2023		\$32.35	\$27.45	\$59.80
Laborers (Class 04 - See notes)	5/1/2024		\$33.60	\$27.65	\$61.25
Laborers (Class 05 - See notes)	5/1/2022		\$37.15	\$27.20	\$64.35
Laborers (Class 05 - See notes)	5/1/2023		\$38.40	\$27.45	\$65.85
Laborers (Class 05 - See notes)	5/1/2024		\$39.65	\$27.65	\$67.30
Laborers (Class 06 - See notes)	5/1/2022		\$37.20	\$27.20	\$64.40
Laborers (Class 06 - See notes)	5/1/2023		\$38.40	\$27.45	\$65.85
Laborers (Class 06 - See notes)	5/1/2024		\$39.70	\$27.65	\$67.35
Laborers (Class 07 - See notes)	5/1/2022		\$37.05	\$27.20	\$64.25
Laborers (Class 07 - See notes)	5/1/2023		\$38.30	\$27.45	\$65.75
Laborers (Class 07 - See notes)	5/1/2024		\$39.55	\$27.65	\$67.20
Laborers (Class 08 - See notes)	5/1/2022		\$36.80	\$27.20	\$64.00
Laborers (Class 08 - See notes)	5/1/2023		\$38.05	\$27.45	\$65.50
Laborers (Class 08 - See notes)	5/1/2024		\$39.30	\$27.65	\$66.95
Laborers (Class 09 - See notes)	5/1/2022		\$36.65	\$27.20	\$63.85
Laborers (Class 09 - See notes)	5/1/2023		\$37.90	\$27.45	\$65.35
Laborers (Class 09 - See notes)	5/1/2024		\$39.15	\$27.65	\$66.80
Laborers (Class 10- See notes)	5/1/2022		\$36.80	\$27.20	\$64.00
Laborers (Class 10- See notes)	5/1/2023		\$38.05	\$27.45	\$65.50
Laborers (Class 10- See notes)	5/1/2024		\$39.30	\$27.65	\$66.95
Laborers (Class 11 -See Notes)	5/1/2022		\$36.70	\$27.20	\$63.90
Laborers (Class 11 -See Notes)	5/1/2023		\$37.95	\$27.45	\$65.40
Laborers (Class 11 -See Notes)	5/1/2024		\$39.20	\$27.65	\$66.85
Laborers (Class 12 -See Notes)	5/1/2022		\$38.40	\$27.20	\$65.60
Laborers (Class 12 -See Notes)	5/1/2023		\$39.65	\$27.45	\$67.10
Laborers (Class 12 -See Notes)	5/1/2024		\$40.90	\$27.65	\$68.55
Laborers (Class 13 -See Notes)	5/1/2022		\$40.43	\$27.20	\$67.63
Laborers (Class 13 -See Notes)	5/1/2023		\$41.65	\$27.45	\$69.10
Laborers (Class 13 -See Notes)	5/1/2024		\$42.93	\$27.65	\$70.58
Laborers (Class 14 -See Notes)	5/1/2022		\$36.55	\$27.20	\$63.75
Laborers (Class 14 -See Notes)	5/1/2023		\$38.25	\$27.45	\$65.70
Laborers (Class 14 -See Notes)	5/1/2024		\$39.50	\$27.65	\$67.15
Laborers Utility (PGW ONLY) (Flagperson)	5/1/2023		\$31.42	\$19.43	\$50.85
Laborers Utility (PGW ONLY) (Flagperson)	5/1/2024		\$32.67	\$19.63	\$52.30
Laborers Utility (PGW ONLY)	5/1/2023		\$38.45	\$19.43	\$57.88
Laborers Utility (PGW ONLY)	5/1/2024		\$39.70	\$19.63	\$59.33
Landscape Laborer	5/1/2023		\$29.03	\$23.80	\$52.83
Landscape Laborer	5/1/2024		\$30.28	\$24.05	\$54.33
Millwright	5/1/2023		\$51.60	\$35.81	\$87.41
Millwright	5/1/2024		\$54.67	\$35.81	\$90.48
Millwright	5/1/2025		\$57.39	\$35.81	\$93.20
Millwright	5/1/2026		\$60.20	\$35.81	\$96.01
Operators Class 01 - See Notes (Building, Heavy, Highway)	5/1/2023		\$52.20	\$32.81	\$85.01

BUREAU OF LABOR LAW COMPLIANCE PREVAILING WAGES PROJECT RATES

Project: 25-02442 - Heavy/Highway	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Operators Class 01 - See Notes (Building, Heavy, Highway)	5/1/2024		\$53.36	\$33.65	\$87.01
Operators Class 01 - See Notes (Building, Heavy, Highway)	5/1/2025		\$54.52	\$34.49	\$89.01
Operators Class 01 - See Notes (Building, Heavy, Highway)	5/1/2026		\$55.67	\$35.34	\$91.01
Operators Class 01a - See Notes (Building, Heavy, Highway)	5/1/2023		\$55.20	\$33.70	\$88.90
Operators Class 01a - See Notes (Building, Heavy, Highway)	5/1/2024		\$56.37	\$34.53	\$90.90
Operators Class 01a - See Notes (Building, Heavy, Highway)	5/1/2025		\$57.52	\$35.38	\$92.90
Operators Class 01a - See Notes (Building, Heavy, Highway)	5/1/2026		\$58.68	\$36.22	\$94.90
Operators Class 02 - See Notes (Building, Heavy, Highway)	5/1/2023		\$51.95	\$32.74	\$84.69
Operators Class 02 - See Notes (Building, Heavy, Highway)	5/1/2024		\$53.11	\$33.58	\$86.69
Operators Class 02 - See Notes (Building, Heavy, Highway)	5/1/2025		\$54.27	\$34.42	\$88.69
Operators Class 02 - See Notes (Building, Heavy, Highway)	5/1/2026		\$55.43	\$35.26	\$90.69
Operators Class 02a - See Notes (Building, Heavy, Highway)	5/1/2023		\$54.97	\$33.61	\$88.58
Operators Class 02a - See Notes (Building, Heavy, Highway)	5/1/2024		\$56.13	\$34.45	\$90.58
Operators Class 02a - See Notes (Building, Heavy, Highway)	5/1/2025		\$57.29	\$35.29	\$92.58
Operators Class 02a - See Notes (Building, Heavy, Highway)	5/1/2026		\$58.44	\$36.14	\$94.58
Operators Class 03 - See Notes (Building, Heavy, Highway)	5/1/2023		\$47.87	\$31.53	\$79.40
Operators Class 03 - See Notes (Building, Heavy, Highway)	5/1/2024		\$49.03	\$32.37	\$81.40
Operators Class 03 - See Notes (Building, Heavy, Highway)	5/1/2025		\$50.18	\$33.22	\$83.40
Operators Class 03 - See Notes (Building, Heavy, Highway)	5/1/2026		\$51.34	\$34.06	\$85.40
Operators Class 04 - See Notes (Building, Heavy, Highway)	5/1/2023		\$47.57	\$31.44	\$79.01
Operators Class 04 - See Notes (Building, Heavy, Highway)	5/1/2024		\$48.73	\$32.28	\$81.01
Operators Class 04 - See Notes (Building, Heavy, Highway)	5/1/2025		\$49.88	\$33.13	\$83.01
Operators Class 04 - See Notes (Building, Heavy, Highway)	5/1/2026		\$51.04	\$33.97	\$85.01
Operators Class 05 - See Notes (Building, Heavy, Highway)	5/1/2023		\$45.85	\$30.93	\$76.78
Operators Class 05 - See Notes (Building, Heavy, Highway)	5/1/2024		\$47.00	\$31.78	\$78.78
Operators Class 05 - See Notes (Building, Heavy, Highway)	5/1/2025		\$48.16	\$32.62	\$80.78
Operators Class 05 - See Notes (Building, Heavy, Highway)	5/1/2026		\$49.32	\$33.46	\$82.78

BUREAU OF LABOR LAW COMPLIANCE PREVAILING WAGES PROJECT RATES

Project: 25-02442 - Heavy/Highway	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Operators Class 06 - See Notes (Building, Heavy, Highway)	5/1/2023		\$44.85	\$30.65	\$75.50
Operators Class 06 - See Notes (Building, Heavy, Highway)	5/1/2024		\$46.02	\$31.48	\$77.50
Operators Class 06 - See Notes (Building, Heavy, Highway)	5/1/2025		\$47.17	\$32.33	\$79.50
Operators Class 06 - See Notes (Building, Heavy, Highway)	5/1/2026		\$48.34	\$33.16	\$81.50
Operators Class 07 (A) - See Notes (Building, Heavy, Highway)	5/1/2023		\$63.33	\$37.68	\$101.01
Operators Class 07 (A) - See Notes (Building, Heavy, Highway)	5/1/2024		\$64.80	\$38.61	\$103.41
Operators Class 07 (A) - See Notes (Building, Heavy, Highway)	5/1/2025		\$66.26	\$39.55	\$105.81
Operators Class 07 (A) - See Notes (Building, Heavy, Highway)	5/1/2026		\$67.73	\$40.48	\$108.21
Operators Class 07 (B) - See Notes (Building, Heavy, Highway)	5/1/2023		\$63.04	\$37.59	\$100.63
Operators Class 07 (B) - See Notes (Building, Heavy, Highway)	5/1/2024		\$64.50	\$38.53	\$103.03
Operators Class 07 (B) - See Notes (Building, Heavy, Highway)	5/1/2025		\$65.97	\$39.46	\$105.43
Operators Class 07 (B) - See Notes (Building, Heavy, Highway)	5/1/2026		\$67.44	\$40.39	\$107.83
Painters - Line Stripping	12/1/2023		\$42.10	\$27.43	\$69.53
Painters - Line Stripping	12/1/2024		\$44.12	\$27.91	\$72.03
Painters Class 2 (see notes)	2/1/2023		\$48.82	\$32.09	\$80.91
Painters Class 2 (see notes)	2/1/2024		\$49.57	\$33.34	\$82.91
Painters Class 2 (see notes)	2/1/2025		\$50.85	\$33.91	\$84.76
Painters Class 3 (see notes)	2/1/2023		\$59.78	\$32.13	\$91.91
Painters Class 3 (see notes)	2/1/2024		\$60.53	\$33.38	\$93.91
Painters Class 3 (see notes)	2/1/2025		\$61.81	\$33.95	\$95.76
Steamfitters (Heavy and Highway - Gas Distribution)	5/1/2022		\$61.34	\$40.28	\$101.62
Steamfitters (Heavy and Highway - Gas Distribution)	5/1/2023		\$64.00	\$41.68	\$105.68
Steamfitters (Heavy and Highway - Gas Distribution)	5/1/2024		\$66.80	\$42.93	\$109.73
Truckdriver class 1(see notes)	5/1/2022		\$35.45	\$20.74	\$56.19
Truckdriver class 1(see notes)	5/1/2023		\$36.14	\$21.55	\$57.69
Truckdriver class 1(see notes)	5/1/2024		\$36.64	\$22.54	\$59.18
Truckdriver class 2 (see notes)	5/1/2022		\$35.55	\$20.74	\$56.29
Truckdriver class 2 (see notes)	5/1/2023		\$36.24	\$21.55	\$57.79
Truckdriver class 2 (see notes)	5/1/2024		\$36.74	\$22.54	\$59.28



COOPERTOWN ELEMENTARY SCHOOL ASBESTOS CONTAINING MATERIAL REMOVAL/RENOVATION PROJECT



ENGINEERING SPECIFICATION and CONTROLS

MARCH, 2025

Prepared by:

Environmental Control Systems, Inc.

*Environmental Engineers and Management Consultants
Celebrating 50 Years of Providing Professional Environmental Services*

950 Sussex Boulevard, Broomall, PA 19008
610-328-2880 | ecs_pa@hotmail.com | www.ecsinfo.net

SCHOOL DISTRICT OF HAVERFORD TOWNSHIP
ASBESTOS CONTAINING MATERIAL REMOVAL PROJECT

COOPERTOWN ELEMENTARY SCHOOL
800 COOPERTOWN ROAD
BRYN MAWR, PA 19010

1.0 ASBESTOS ABATEMENT

1.2 Supplemental Job Specification

1.3 SCOPE OF WORK

1.3.1 This specification covers the abatement of exposure to asbestos hazards from the building structures and components listed herein. The work on this project will be accomplished under one contract, and supported by the unit pricing:

BASE BID DESCRIPTION OF WORK:

1. **ACTION ITEM #1: REMOVAL/DISPOSAL OF APPROXIMATELY 1,400 SQUARE FEET OF ASBESTOS CONTAINING 9"x9" FLOOR TILE WITHIN THE AUDITORIUM AND SURROUNDING AREAS. MASTIC IS NON DETECT AND WILL REMAIN.**

2. **ACTION ITEM #2: REMOVAL/DISPOSAL OF APPROXIMATELY 3,500 SQUARE FEET OF ASBESTOS CONTAINING SUSPENDED CEILING WITHIN THE AUDITORIUM.**

- District will remove all non-affixed furniture prior to mobilization.
- Air monitoring will be performed by the district & project environmental engineer on behalf of the owner to verify that the building beyond the contamination area and the outside environment remains uncontaminated.
- State, county and local permits including the 10-day notice are the responsibility of the asbestos abatement contractor.
- No remobilizations are expected for this project.

ANALYSIS | MAP | PHOTOS |
UNIT PRICE SCHEDULE



EMSL Analytical, Inc.

5221 Militia Hill Road Plymouth Meeting, PA 19462

Tel/Fax: (610) 828-3102 / (610) 828-3122

<http://www.EMSL.com> / plymouthmeetinglab@emsl.com

EMSL Order: 182500558

Customer ID: ECSPA30

Customer PO:

Project ID:

Attention: Mike Bednar

Environmental Control Systems

950 Sussex Blvd.

Broomall, PA 19008

Phone: (610) 587-6015

Fax: (610) 328-9819

Received Date: 02/04/2025 9:00 AM

Analysis Date: 02/04/2025

Collected Date:

Project: COOPERTOWN ES

Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
020325-01 <small>182500558-0001</small>	AUDITORIUM - CEILING	White Non-Fibrous Homogeneous		77% Non-fibrous (Other)	23% Chrysotile
020325-02 <small>182500558-0002</small>	AUDITORIUM - CEILING	White Non-Fibrous Homogeneous		76% Non-fibrous (Other)	24% Chrysotile
020325-03 <small>182500558-0003</small>	AUDITORIUM - CEILING	White Non-Fibrous Homogeneous		76% Non-fibrous (Other)	24% Chrysotile

Analyst(s)

Tahirrah Steele (3)

Kevin Ream, Laboratory Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method") but augmented with procedures outlined in the 1993 ("final") version of the method. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Plymouth Meeting, PA NVLAP Lab Code 200699-0, Philadelphia ALL-292, VA 3333000315, AIHA LAP, LLC-IHLAP Accredited #178659

Initial report from: 02/05/2025 11:33:52



EMSL Analytical, Inc.

5221 Militia Hill Road Plymouth Meeting, PA 19462
Tel/Fax: (610) 828-3102 / (610) 828-3122
<http://www.EMSL.com> / plymouthmeetinglab@emsl.com

EMSL Order: 182100429

Customer ID: ECSPA30

Customer PO:

Project ID:

Attention: Barb Lippmann
Environmental Control Systems
950 Sussex Blvd.
Broomall, PA 19008

Phone: (610) 587-6016

Fax: (610) 328-9819

Received Date: 02/03/2021 10:10 AM

Analysis Date: 02/05/2021

Collected Date:

Project: Coopertown ES

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
020321-01	Rm 107 - Cove Base Mastic	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

182100429-0001

Analyst(s)

Adam Gart (1)

Kevin Ream, Laboratory Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method") but augmented with procedures outlined in the 1993 ("final") version of the method. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Plymouth Meeting, PA NVLAP Lab Code 200699-0, Philadelphia ALL-292, VA 3333000315, AIHA-LAP, LLC IHLAP #178659

Initial report from: 02/05/2021 13:32:03



EMSL Analytical, Inc.

5221 Militia Hill Road Plymouth Meeting, PA 19462

Tel/Fax: (610) 828-3102 / (610) 828-3122

<http://www.EMSL.com> / plymouthmeetinglab@emsl.com

EMSL Order: 182100094

Customer ID: ECSPA30

Customer PO:

Project ID:

Attention: Barb Lippmann
Environmental Control Systems
950 Sussex Blvd.
Broomall, PA 19008

Phone: (610) 587-6016

Fax: (610) 328-9819

Received Date: 01/08/2021 1:00 PM

Analysis Date: 01/11/2021

Collected Date:

Project: Coopertown Elem

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos % Type
			% Fibrous	% Non-Fibrous	
210108-01 <small>182100094-0001</small>	Rm 114 Art - Brown 9x9	Brown Non-Fibrous Homogeneous		90% Non-fibrous (Other)	10% Chrysotile
210108-02 <small>182100094-0002</small>	Rm 114 Art - Brown Mastic	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
210108-03 <small>182100094-0003</small>	Rm 103 - Gray 9x9	Gray Non-Fibrous Homogeneous		90% Non-fibrous (Other)	10% Chrysotile
210108-04 <small>182100094-0004</small>	Rm 103 - Gray Mastic	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
210108-05 <small>182100094-0005</small>	Rm 106 - Brown 9x9	Brown Non-Fibrous Homogeneous		88% Non-fibrous (Other)	12% Chrysotile
210108-06 <small>182100094-0006</small>	Rm 106 - Brown Mastic	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
210108-07 <small>182100094-0007</small>	Rm 107 - Gray 9x9	Gray Non-Fibrous Homogeneous		90% Non-fibrous (Other)	10% Chrysotile
210108-08 <small>182100094-0008</small>	Rm 107 - Gray Mastic	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
210108-09 <small>182100094-0009</small>	Kiln Room - Brown 9x9	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
210108-10 <small>182100094-0010</small>	Kiln Room - Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
210108-11 <small>182100094-0011</small>	Kitchen - 12x12 Light Gray Tile	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
210108-12 <small>182100094-0012</small>	Kitchen - 12x12 Mastic	Black/Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (Other)	None Detected



EMSL Analytical, Inc.

5221 Militia Hill Road Plymouth Meeting, PA 19462

Tel/Fax: (610) 828-3102 / (610) 828-3122

<http://www.EMSL.com> / plymouthmeetinglab@emsl.com

EMSL Order: 182100094

Customer ID: ECSPA30

Customer PO:

Project ID:

Analyst(s)

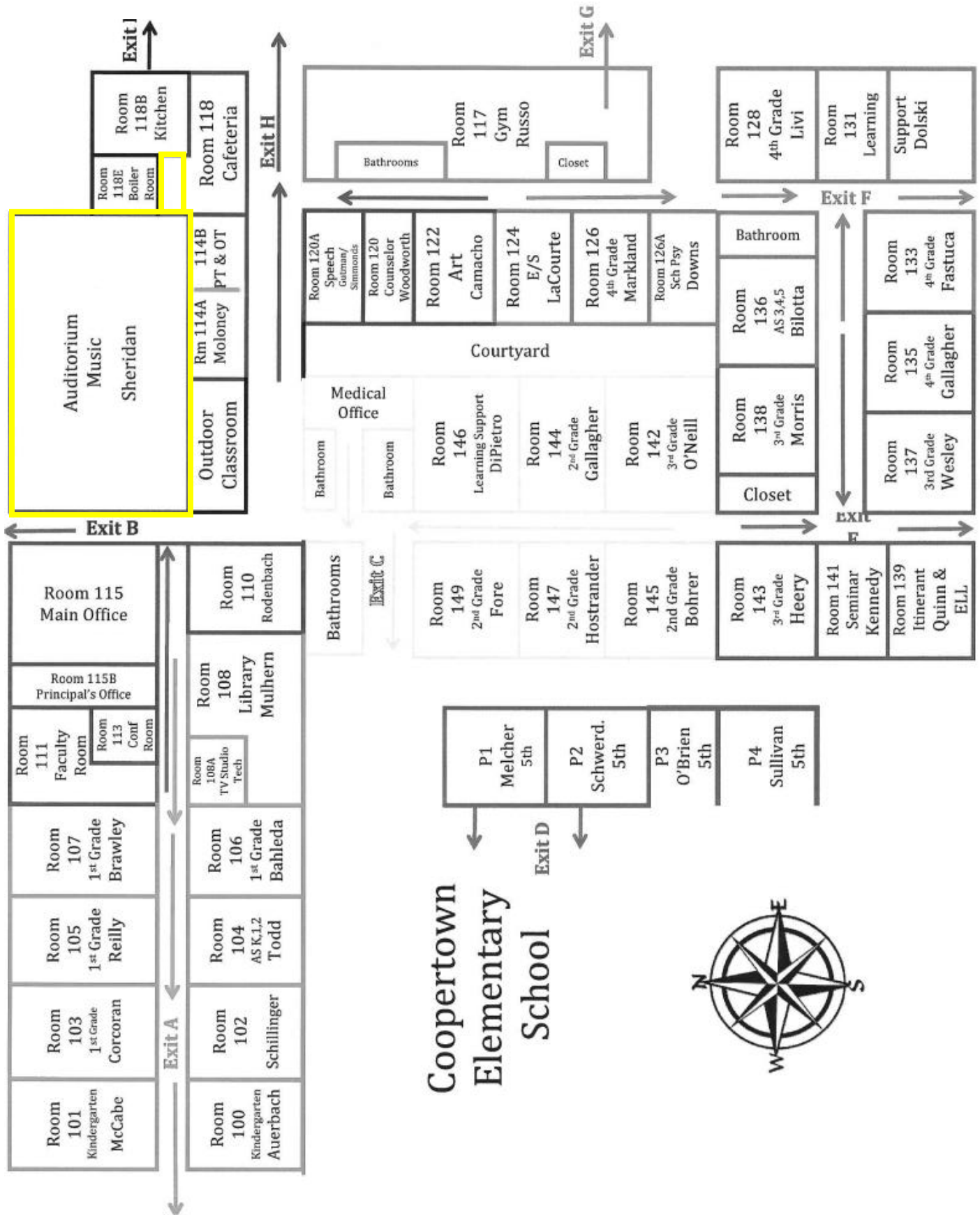
Adam Gart (12)

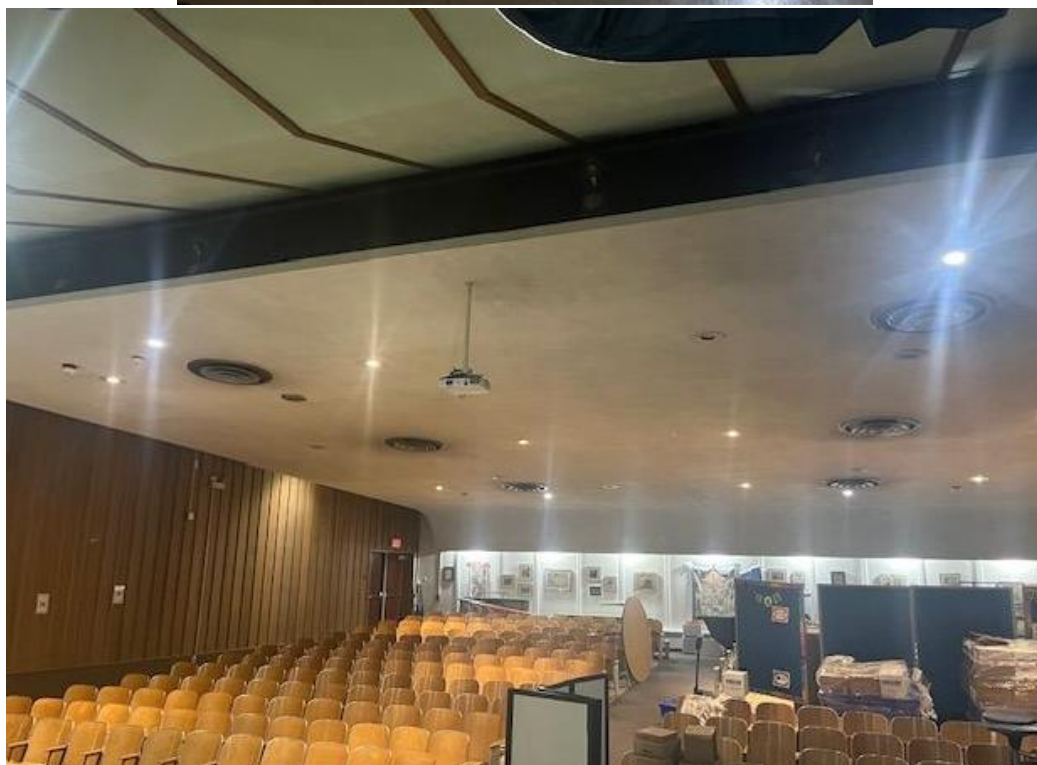
Kevin Ream, Laboratory Manager
or Other Approved Signatory

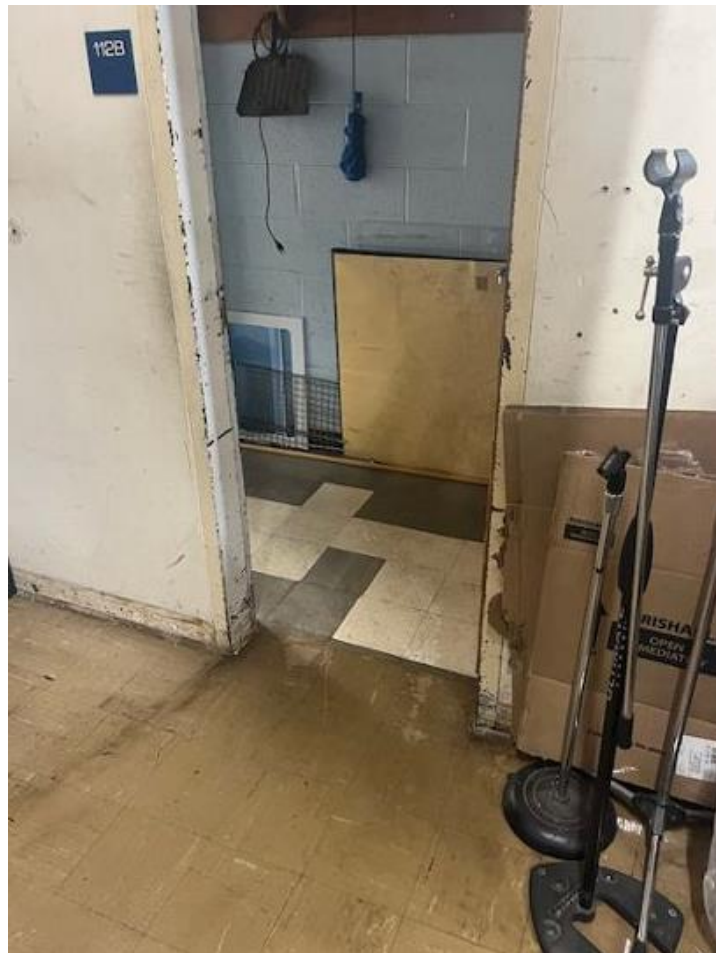
EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method") but augmented with procedures outlined in the 1993 ("final") version of the method. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Plymouth Meeting, PA NVLAP Lab Code 200699-0, Philadelphia ALL-292, VA 3333000315, AIHA-LAP, LLC IHLAP #178659

Initial report from: 01/11/2021 13:45:45







UNIT PRICING SHEET – COOPERTOWN ELEMENTARY SCHOOL RENOVATION

FIRM NAME: _____ **Date:** _____

The following list of materials will constitute the unit pricing for the School District of Haverford Township. This unit price sheet will be used for any necessary work and ‘Latent Conditions’ associated with this project.

Type of Material	Units	Unit Price
		(Laborer)
Thermal Systems Insulation (Removal)		
1" to 3" Pipe Covering	Linear Foot	
4" to 6" Pipe Covering	Linear Foot	
7" to 9" Pipe Covering	Linear Foot	
Elbows & Fittings (TSI Removal)		
1" to 3" Fittings	Each	
4" to 6" Fittings	Each	
7" to 9" Fittings	Each	
Thermal Systems Pipes & Elbows Patch (Removal)		
1" to 3"	Linear Foot	
4" to 6"	Linear Foot	
7" to 9"	Linear Foot	
Mini Containments (Tents)	Running Foot	
Disposal Cost	Per Barrel	
Glove Bags as Required	Each	
6 Hour Mobilization	Each	
12 Hour Mobilization	Each	
24 Hour Mobilization	Each	
HEPA Vacuum (Clean Up)	Square Foot	
Vinyl Asbestos Tile (VAT) Removal	Square Foot	
Mastic Removal (Chemical)	Square Foot	
Mastic Removal (Blasttrac)	Square Foot	
Mastic Removal (Grinding)	Square Foot	
Carpet Removal & Disposal	Square Foot	
Transite Removal	Square Foot	
Board Removal	Square Foot	
Caulk Removal & Disposal	Linear Foot	
Board Mastic Removal	Square Foot	
Generator - Weekly Fee	(45,000 kW)	
Generator - Bi Weekly Fee	(45,000 kW)	
Generator - Monthly Fee	(45,000 kW)	

All work to be performed using modified full containment removal procedures, and policies established by the AHERA CFR-763.

1.3.1.1 Quantities, lengths and footage listed herein are for general arrangement and probable estimated linear or square footage only. The Contractor is responsible to verify at each location, quantities listed and is not to assume that the probable quantities scheduled is totally accurate.

1.3.2 The Contractor shall furnish all labor and materials, services, insurances and equipment necessary for the removal of materials as listed herein; under controlled environmental conditions by enclosed barrier Negative-Air procedures or by Glove Bag method where specifically specified. The Contractor shall be responsible for the engagement of all sub-contractors (with Consultants/Engineer's written approval) to accomplish the work within the scope of work for the asbestos abatement project.

General notes:

1.3.3 The General Conditions, Supplementary Conditions, Instructions to Bidders, General Specifications, General Job Specifications, Supplementary Job Specifications, Pennsylvania Act 194, Contract Documents, FRS's - Functional Space Record assessments, AHERA Management Plan, Walk Through Notes, any future Addenda and Contract Drawings listed in the forepart of these Specifications shall be and are hereby made a part of this Division, as well as, all applicable Federal, State, and Local regulations.

1.3.4 Contractor is responsible as an expert and a professional for state-of-the-art and prudent person generally accepted practices in the abatement of exposure for asbestos hazards.

1.4 DESCRIPTION OF WORK

1.4.1 The work specified herein shall be the scraping, cutting and removal of asbestos containing materials by competent persons trained, knowledgeable and qualified in the techniques of abatement, handling and disposal of asbestos-containing and asbestos-contaminated materials and the subsequent cleaning of contaminated areas, who comply with all applicable Federal, State, and Local regulations and are capable of and willing to perform the work of this Contract.

1.4.2 Before applying polyethylene protection, HEPA vacuum and clean areas.

1.4.2.1 Scrape off the insulation and any undercoat. Brush, wash and clean the piping.

1.4.2.2 Encapsulate joints, threads, elbows, bends, tees and unions.

1.4.2.3 Material submittals and documentation for the Engineer/Consultant's approval in accordance with the General Conditions.

1.4.3 The Contractor shall supply all labor, materials, services, insurance, permits and equipment necessary to carry out the work in accordance with all applicable Federal, State and Local regulations and these specifications.

1.4.4 The Contractor is responsible for restoring the work area and auxiliary areas utilized during abatement to conditions equal to or better than original. Any damages caused during the performance of abatement activities shall be repaired by the Contractor (e.g. paint peeled off by

barrier tape, nail holes, water damage, broken glass, landscape damage, plumbing, heating or electrical fixture) at no additional expense to the Owner.

1.5 APPLICABLE STANDARDS AND GUIDELINES

ASBESTOS REMOVAL-FLOOR TILE AND MASTIC (VARIOUS COLORS AND SIZES).

Engineering Controls:

- Manual means - Install critical barriers, a 3-stage worker decontamination facility and negative pressure differential.
- Mechanical means - install a full containment work area isolation including critical barriers, a 3-stage worker decontamination facility and temporary negative pressure differential.

Min. Resp. Protection:

- Manual Means - Half-face negative pressure respirators with HEPA-P100 filters.
- Mechanical means - Powered Air Purifying Respirators (PARP). The respiratory protection may be downgraded to a half-face APR if the contractor can confirm based on objective data (personnel air sampling) that exposure levels to asbestos during removal of the identified material will be sufficient for that respirator.
- Perform the required OSHA worker exposure air monitoring.

Removal:

- Remove the material using manual means and wet methods. Allow surfactant to soak into material and remove in manageable sections. Do not let debris to accumulate, perform cleaning of up of loose debris continuously.

Preparation/Transport:

- Package and label the waste immediately. Store all waste in a lockable storage dumpster.

Disposal:

- Manual means-dispose of as non- friable, non-hazardous asbestos-containing waste.
- Mechanical means-dispose of as friable, hazardous asbestos containing waste. A waste shipment (manifest) will be required.
- SPECIAL NOTE-solvents used for the removal of flooring adhesives or mastics can be subject to strict disposal requirements. The Contractor shall be responsible for complying with all applicable regulations and reporting requirements if the Contractor utilizes these regulated solvents.

1.5.1 General Requirements (See definitions at the end of this document)

1.5.1.1 All work under this contract shall be done in strict accordance with all applicable Federal, State, and Local regulations, standards and codes governing asbestos abatement and any other trade work done in conjunction with the abatement including but not limited to transport, and

disposal of asbestos containing/contaminated materials, lead based/containing surface coatings and contaminated materials, and all other hazardous materials.

- Requirements include obtaining permits, licenses, inspections, releases and similar documentation, as well as payments, statements and similar requirements associated with codes, regulations, and standards.
- Regulations, Standards, and Codes (General): 1. General applicability of federal, state, and local regulations, standards and codes governing hazardous materials abatement, demolition, transport, and disposal, except to the extent that more explicit or more stringent requirements are written directly into the contract documents, all applicable regulations, standards, and codes have the same force and effect and are made a part of the contract documents as if copied directly into the contract documents, or as if published copies are bound herewith.
- Contractor Responsibility: The Contractor shall assume full responsibility and liability for the compliance with all applicable federal, state, and local regulations including District Specifications pertaining to work practices, transport, disposal, and protection of workers, visitors to the site, and persons occupying areas adjacent to the site. 1. The contractor is responsible for providing training, medical examinations and maintaining training/medical records of personnel as required by the applicable federal, state, and local regulations. 2. The Contractor shall hold the Owner and Project Environmental Consultant harmless for failure to comply with any applicable hazardous materials abatement, transport, disposal, safety, health or other regulation on the part of himself, his employees, or his subcontractors.

1.5.1.2 The most recent edition of any relevant regulation, standard, document or code shall be in effect and is hereby made a part of these specifications. Where conflict among the requirements or with these specifications exists the most stringent requirements shall be utilized.

1.5.1.3 Copies of all standards, regulations, codes and other applicable documents, including this specification and those listed in Section 1.5.2 shall be available at the work site in the clean change area of the worker decontamination systems.

Contractor shall perform all Work in compliance with current, applicable federal, state, and local regulations, standards and codes including District specifications

1.5.2 Specific requirements

1.5.2.1 Occupational Safety and Health Administration (OSHA)

1. Title 29 Code of Federal Regulations Section 1910.1001 - General Industry Standard for Asbestos. 2. Title 20 Code of Federal Regulations Section 1910.134 - General Industry Standard for Respiratory Protection. 3. Title 29 Code of Federal Regulations Section 1926/58 - Construction Industry. 4. Title 29 Code of Federal Regulations Section 1910.2 - Access to Employee Exposure and Medical Records. 5. Title 29 Code of Federal Regulations Section 1910/1200 - Hazard Communication.

1.5.2.2 Environmental Protection Agency (EPA).

1. Title 40 Code of Federal Regulations Part 61 National Emission Standard for Hazardous Air Pollutants: Asbestos Abatement Projects, 2. Title 40 Code of Federal Regulations Part 763 subpart F, Friable Asbestos-Containing Materials in Schools; Identification and Notification.

1.5.2.3 Commonwealth of Pennsylvania Department of Labor & Industry & Act 194.

1.6 SUBMITTALS AND NOTICES

1.6.1 Contractor shall: Make all necessary notices and submissions as well as obtaining local permits.

1.6.1.1 Prior to Commencement of work:

1.6.1.1.1 Send written notification, in accordance with 40 CFR Part 61.146 of Subpart M, to the appropriate State or Federal air pollution control agency responsible for the enforcement of the National Emission for Asbestos at least ten (10) days prior to the commencement of any on-site project activity. Notify Engineer/Consultant with a copy of the notice.

A. Environmental Protection Agency Region III office,

B. Occupational Safety Health Administration Regional Office.

C. Regional Air Pollution Control Engineer, Department of Environmental Resources, Bureau of Occupational Health.

D. Disposal, Regional Solid Water Coordinator, Department of Environmental Resources, Bureau of Occupational Health.

1.6.1.1.2 Notification shall include the following information:

Name and address of the Contractor.

Address and description of the building, including size, age and prior use of the building and amount of friable asbestos material present (square feet).

Scheduled starting and completion dates for removal.

Procedures that will be employed to comply with the regulations.

The name and address of the waste disposal site where the asbestos waste will be deposited.

The names, address and special waste haulers number.

1.6.1.1.3 Submit proof satisfactory to the Engineer/Consultant that required permits, site location and arrangements for transport and disposal of asbestos containing waste materials have been made. Obtain and submit a copy of handling procedures and list of protective equipment utilized for asbestos disposal at the landfill, signed by the landfill Owner.

1.6.1.1.4 Submit documentation satisfactory to the Engineer/Consultant that the Contractor's employees, including foremen, supervisors and any other company personnel or agents who may be exposed to airborne asbestos fibers or who may be responsible for any aspects of abatement

activities, have received adequate training that includes, at a minimum, information in Part 4 Section 4.1 of this document.

1.6.1.1.5 Submit documentation from a physician that all employees or agents who may be exposed to airborne asbestos in excess of background level have been provided with an opportunity to be medically monitored to determine whether they are physically capable of working while wearing the respirator required without suffering adverse health effects. In addition, document that personnel have received medical monitoring as required in OSHA 29 CFR 1910.1001 (j). The Contractor must beware of and provide information to the examining physician about unusual conditions in the workplace environment (temperatures, humidity, chemical contaminants) that may impact on the employee's ability to perform work activities:

1.6.1.1.6 Submit to the Engineer/Consultant shop drawings for layout and construction of decontamination enclosure systems and barriers for isolation of the work area as detailed in this specification and required by applicable regulations.

1.6.1.1.7 Damage Report - With the Owner's Representative, and Engineer/Consultant inspect the premises wherein all abatement and abatement related activities will occur and submit a statement signed by both agreeing on building and fixture condition prior to the commencement of work.

1.6.1.1.8 Submit manufacturer's certification that HEPA vacuums, negative pressure ventilation units and other local exhaust ventilation equipment conform to ANSI Z9.2 - 79.

1.6.1.1.9 When rental equipment is to be used in abatement areas or to transport asbestos contaminated waste, a written notification concerning intended use of the rental equipment must be provided to the rental agency with a copy submitted to the Engineer/Consultant.

1.6.1.1.10 Document NIOSH approvals for all respiratory protection devices utilized on site. Include manufacturer certification of HEPA filtration capabilities for all cartridge and filters.

1.6.1.1.11 Submit to the Engineer/Consultant for approval - manufacturer's certification that vacuums, ventilation equipment, and other equipment required to contain airborne fibers conform to ANSI Z9.2.

1.6.1.1.12 Submit documentation of respirator fit-testing for all Contractor employees and agents who must enter the work area. This fit-testing shall be in accordance with qualitative procedures as detailed in the OSHA Lead Standard 29 CFR 1910.1025 Appendix D Qualitative Fit Test Protocol or be quantitative in nature.

1.6.1.2 During Abatement Activities

1.6.1.2.1 Submit weekly job progress reports detailing abatement activities. Include review of progress with respect to previously established milestones and schedules, major problems and action taken, injury reports, equipment breakdown and bulk material and air sampling results conducted by Contractor's Air Sampling Professional.

1.6.1.2.2 Submit copies of all transport manifests, trip tickets and disposal receipts for all asbestos waste materials removed from the work area during the abatement process. This Contractor shall cause a special waste manifest (VHW-1001) to be filled out for each disposal of asbestos material.

1.6.1.2.3 Submit daily, copies of worksite entry logbooks with information on worker and visitor access

1.6.1.2.4 Submit logs documenting filter changes on respirators, HEPA vacuums, Negative-air, and other engineering controls.

1.6.1.2.5 Submit results of bulk material analysis and air sampling data collected during the course of the abatement including OSHA compliance air monitoring results.

1.6.1.2.6 Submit results of materials testing conducted during the abatement for purposes of utilization during abatement activities.

1.6.1.2.7 Post in the clean room area of the worker decontamination enclosure a list containing the names, addresses and telephone numbers of the Contractor, the Owner, the Engineer/Consultant, the Asbestos Project Manager, the General Superintendent, the Air Sampling Professionals, the testing laboratory and any other personnel who may be required to assist during abatement activities (e.g. Safety Officer, Building Maintenance Supervisor).

1.6.2 Owner Shall:

1.6.2.1 Prior to Commencement of Work:

1.6.2.1.1 Notify occupants of work areas that may be disrupted by the abatement of project dates and requirements for relocation. Arrangements are to be made prior to start, for relocation of desks, files, equipment and personal possessions to avoid unauthorized access into the work area.

1.6.2.1.2 Submit to the Contractor, results of pre-abatement air sampling (if conducted) including location of samples, name of Air Sampling Professional, equipment utilized and method of analysis.

1.6.2.1.3 Document that Owner's employees who will be required to enter the work area during abatement have received training equal to that detailed in Part 4 Section 4.1.

1.6.2.1.4 Provide to the Contractor information concerning access, shutdown and protection requirements of certain equipment and systems in the work area.

1.6.2.2 During Abatement

1.6.2.2.1 Submit to the Contractor, results of bulk material analysis and air sampling data collected during the course of the abatement. These sample results are for information only. They serve only to monitor contractor performance during the project and shall not release the Contractor from any responsibility to sample for OSHA compliance.

1.6.2.2.2 The Owner shall not occupy the designated work areas of the building during the work process. During this period, the Contractor will be responsible for the building security and maintaining the existing building and utility systems such as plumbing or electrical installations.

Should the failure of any utility occur, the Owner shall not be responsible to the Contractor for the loss of time or any other expense incurred.

1.7 SITE AND BUILDING SECURITY

1.7.1 The work area is to be restricted only to authorized, trained, and protected personnel. These may include the Contractor's employees, employees of Subcontractors, owner employees and representatives, State and local inspectors and any other designated individuals. A list of authorized personnel will be established prior to job start and posted in the clean room of the worker decontamination facility.

1.7.2 Entry into the work area by unauthorized individuals shall be reported immediately to the Engineer/Consultant by the Contractor.

1.7.3 A log book shall be maintained in the clean-room area of the worker decontamination system. Anyone who enters the work area must record name, affiliation, time in, time out and type of personal protection for each entry.

1.7.4 Access to the work area shall be through a single worker decontamination system located as designated on the drawings. All other means of access (doors, windows, hallways, etc.) shall be blocked or locked so as to prevent entry to or exit from the work area. The only exceptions for this rule are the waste pass-out airlock which shall be sealed except during the removal of containerized asbestos waste from the work area, and emergency exits in case of fire or accident. Emergency exits shall not be locked from the inside, however, they shall be sealed with polyethylene sheeting and tape until needed.

1.7.5 Contractor should have control of site security during abatement operations whenever possible, in order to protect work efforts and equipment.

1.7.6 Contractor will have Owner's assistance in notifying building occupants of impending activity and enforcement of restricted access by Owner's employees.

1.8 EMERGENCY PLANNING

1.8.1 Emergency planning shall be developed prior to abatement initiation and agreed to by Contractor, Engineer/Consultant, and Owner.

1.8.2 Emergency procedures shall be in written form and prominently posted in the clean change area and equipment room of the worker decontamination area. Everyone prior to entering the work area must read and sign these procedures to acknowledge receipt and understanding of work site layout, location of emergency exits and emergency procedures.

1.8.3 Emergency planning shall include written notification of police, fire and emergency medical personnel of planned abatement activities, work schedule and layout of work area, particularly barriers that may affect response capabilities.

1.8.4 Emergency planning shall include considerations of fire, explosion, toxic atmospheres, electrical hazards, slips, trips, and falls, confined spaces and heat related injury. Written procedures shall be developed and employee training in procedures shall be provided.

- All combustible rubbish and debris, including asbestos waste shall be properly packaged, labeled and stored in a District designated lockable storage facility at the end of each working day. A minimum of one (1) 4A/60BC dry-chemical extinguisher shall be maintained at each of the following locations:
 - At each corner of the work area. Where no clear corners exist, four (4) extinguishers shall be placed around the exterior wall of the work area so that they are approximately 25 percent of the total distance apart.
 - a. Exception: Where total contained work area is less than 1,000 square feet, two (2) 4A/60BC extinguishers shall be provided. All extinguishers shall be clearly identified with red tape. Contractor shall ensure that on site personnel are aware of the location and proper use of all extinguishers and other fire/life safety equipment.

1.8.5 Employees are to be trained in evacuation procedures in the event of workplace emergencies.

1.8.5.1 For non-life-threatening situations - employees injured or otherwise incapacitated shall decontaminate following normal procedures with assistance from fellow workers if necessary, before exiting the workplace to obtain proper medical treatment.

1.8.5.2 For life-threatening injury or illness, worker decontamination shall take least priority after measures to stabilize the injured worker, remove him from the workplace and secure proper medical treatment.

1.8.6 Telephone numbers of all emergency response personnel shall be prominently posted in the clean change area and equipment room, along with the location of the nearest telephone.

1.9 PRE-START MEETING

1.9.1 The successful bidder shall attend a pre-start job meeting as designated by the Engineer/Consultant. Attending this meeting will be representatives of the Owner and the Owner's agents along with testing/monitoring personnel (Air Sampling Professional) who will participate in the Owner's testing/monitoring program.

1.9.2 The Contractor and supervisory personnel who will provide on-site direction of the abatement activities must attend. The Contractor's Air Sampling Professional shall also attend.

1.9.3 At this meeting the Contractor shall provide all submittals as required in Section

1.9.3.1 Preparation of work area

1.9.3.2 Personal protective equipment including respiratory protection and protective clothing.

1.9.3.3 Employees who will participate in the project, including delineation of experience, training, and assigned responsibilities during the project.

1.9.3.4 Decontamination procedures for personnel, work area and equipment.

1.9.3.5 Abatement methods and procedures to be utilized.

1.9.3.6 Required air monitoring procedures.

1.9.3.7 Procedures for handling and disposing of waste materials.

1.9.3.8 Procedures for final decontamination and cleanup.

1.9.3.9 A sequence of work and performance schedule.

1.9.3.10 Procedures for dealing with heat stress.

1.9.3.11 Emergency procedures.

1.9.3.12 Type “C” respirators, continuous air supplied, full face masks, will be required continually during the removal of suspension system ceiling work procedures and removal of all material from the Boiler Room breaching. Down-grading of respirators will not be permitted during removal of this work.

1.9.3.13 The Owner’s representative, the Engineer/Consultant and the Contractor shall conduct a damage inspection at each building before commencement of any work. All parties shall agree in writing on the condition of the buildings and fixtures, prior to commencement of the work. Schedules or lists of damaged or broken materials, furnishings, etc., are to be recorded.

2.1. MATERIALS

2.1.1 General

2.1.1.1 Deliver all materials in the original packages, containers or bundles bearing the name of the manufacturer and the brand name.

2.1.1.2 Store all materials subject to damage off the ground, away from wet or damp surfaces and under cover sufficient to prevent damage or contamination. Replacement materials shall be stored outside of the work area until abatement is completed.

2.1.1.3 Damaged, deteriorating or previously used materials shall not be used and shall be removed from the worksite and disposed of properly.

2.1.1.4 Polyethylene sheeting for walls, critical barriers and stationary objects shall be a minimum of 6 mil thick and double layered. Overlapping floor sheeting at least 18 and 30 inches. For floors and all other uses sheeting of at least 6 mil thickness double layer, with the first layer extending up the wall at least 12 inches. The second layer shall extend up sidewalls at least 24 inches. Sheeting shall be sized so as to minimize the number of seams necessary. No seams shall be located at the joints between walls and floors; triple layer over carpet and hardwood flooring shall be used in widths selected to minimize the frequency of joints.

2.1.1.5 Method of attaching polyethylene sheeting shall be selected to minimize damage to equipment and surfaces. Method of attachment may include any combination of duct tape or other waterproof tape, furring strips, spray glue, staples, nails, screws or other effective procedures capable of sealing adjacent sheets of polyethylene and capable of sealing polyethylene to dissimilar finished or unfinished surfaces under both wet and dry conditions (including the use of amended water).

2.1.1.6 Polyethylene sheeting utilized for worker decontamination enclosure shall be opaque white or black in color.

2.1.1.7 1/2-inch plywood or 3/8-inch flake board to protect glass doors, casework, and hardwood flooring.

2.1.1.8 Disposal bags shall be of 6 mil. Polyethylene pre-printed with labels as required by EPA regulation 40 CFR 61.152 (b) (I) (iv) or OSHA requirement 29 CFR 1910.1001 (g) (2) (ii).

2.1.1.9 Disposal drums shall be metal or fiberboard with locking ring tops.

2.1.1.10 Stick-on labels as per EPA or OSHA requirements (see 2.1.2.7) for disposal drums.

2.1.1.11 Warning signs as required by OSHA 29 CFR 190.1001 Asbestos Proposed Rule, Federal Register and Vol. 49, Tuesday, April 10, 1984.

2.1.2 Removal

2.1.2.1 Surfactant (wetting agent) shall be a 50/50 mixture of polyethylene ether and polyethylene ester, or equivalent, mixed in a proportion of 1 fluid ounce to 5 gallons of water or as specified by manufacturer. (An equivalent surfactant shall be understood to mean a material with a surface tension of 29 dynes/cm as tested in its properly mixed concentration, using ASTM method D1331-56-” Surface and Interfacial Tension of Solutions of Surface-Active Agents.”) Where work area temperature may cause freezing of the amended water solution, the addition of ethylene glycol in amounts sufficient to prevent freezing will be permitted.

2.2 EQUIPMENT

2.2.1 General

2.2.1.1 A sufficient quantity of Micro trap TM negative pressure ventilation units equipped with HEPA filtration and operated in accordance with Negative-Air TM Natale U.S. Patent #4,604,111, August 5, 1986; EPA guidance document EPA 560/5-83-002 Guidance for Controlling Friable Asbestos Containing Materials in Buildings Appendix F; and Federal Register June 20, 1986, Part II Department of Labor, Occupational Safety and Health Administration 29 CFR Parts 1910 and 1926. All equipment, procedures, designs, and layouts shall be in accordance with the above-named patent. Recommended Specifications and Operating Procedures for the Use of Negative Pressure Systems shall be utilized so as to provide one workplace minimum air change every 15 minutes.

To calculate total air flow requirement:

Total ft³/min = Vol. of work area (in ft³).

15 minutes

To calculate the number of units needed for the abatement:

Number of units needed = (Total ft³/min) (Capacity of unit in ft³/min.)

If air-supplied respirators are utilized, estimate the volume of supplied air and add to workplace air volume when calculating ventilation requirements. For small enclosures and Glove Bag method procedures, a HEPA filtered vacuum system may be utilized to provide negative air pressure.

2.2.1.1.1 After construction of the enclosure is completed, a ventilation system (s) should be installed to create a negative pressure within the enclosure with respect to the area outside the enclosure. Such ventilation systems must be equipped with HEPA filters to prevent the release of asbestos fibers to the environment outside the enclosure and should be operated 24 hours per day during the entire project until the final cleanup is completed, and the results of final air samples are received from the laboratory. Enough air should be exhausted to create a pressure of - 0.02 inches of water within the enclosure with respect to the area outside the enclosure. These ventilation systems should exhaust the HEPA filtered clean air outside the building in which the asbestos removal, demolition, or renovation is taking place. If access to the outside is not available, and building is unoccupied, the ventilation system can exhaust the HEPA filtered asbestos free air to an area within the building that is as far away as possible from the enclosure. Care should be taken to ensure that the clean air is released either to an asbestos free area or in such a way as not to disturb any asbestos containing materials.

2.2.1.2 Type “C” continuous air supplied respirators in positive pressure demand mode with full facepieces and HEPA filtered disconnect protection are required for all shifts - all abatement work unless otherwise specified until the successful completion of final clearance air monitoring.

Powered air purifying respirators equipped with HEPA filters and full facepieces or respirators with a higher NIOSH assigned protection factor may be used for inspection or repair work of less than one (1) hour duration per day after approved by the Engineer/Consultant. A sufficient supply of charged replacement batteries and filters and a flow test meter shall be available in the clean change area for use with powered air purifying respirators. Air purifying respirators with dual high-efficiency (HEPA) filters may be utilized during work area preparation activities. (See Section 3.3.2.3) Spectacle kits and eyeglasses must be provided for employees who wear glasses and who must wear full facepiece respirators. Respirators shall be provided that have been tested and approved by the National Institute of Occupational Safety and Health for use in asbestos contaminated atmospheres.

2.2.1.3 Compressed air systems shall be designed to provide air volumes and pressures to accommodate respirator manufacturer’s specifications. The compressed air systems shall have a receiver of adequate capacity to allow escape of all respirator wearers from contaminated areas in the event of compressor failure. Compressors must meet the requirements of 29 CFR 1910.134 (d). Compressors must have an in-line carbon monoxide monitor and periodic inspection of the carbon monoxide monitor with audible alarm must be evidenced. Documentation of adequacy of compressed air systems/respiratory protection system must be retained on site. This documentation will include a list of compatible components with the maximum number and type of respirators that may be used with the system. Periodic testing of compressed air shall insure that systems provide air of sufficient quality (Grade D breathing air as described in Compressed Gas Association Commodity Specifications G-7.1).

2.2.1.4.1 Down-grading when permitted, shall be in accordance with the following table:

Maximum airborne fiber concentration outside the respirator to maintain exposure inside the respirator below 0.01 Respirator Selection PF fibers/cc

High efficiency cartridge filter type (half mask) 10 0.1 f/cc

High efficiency cartridge filter type (full mask) 50 0.5 f/cc

Powered-air purifying (PAPR) helmet type 100 - 300 1.5 f/cc

Powered-air purifying (PAPR) tight-fitting half mask 100 - 300 3 f/cc

Powered-air purifying (PAPR) tight-fitting full-face mask 100 - 300 5 f/cc

Type C continuous - flow supplied air (half mask) 1,000 10 f/cc

Type C continuous - flow supplied air (full face or hood type) 2,000 20 f/cc

Pressure-demand self-contained breathing apparatus (SCBA) 10,000 100 f/cc

If approved, where respirators with disposable filter are employed, provide sufficient filters for replacement as required by the worker or applicable regulation.

2.2.1.4.2 All personnel are to be clean shaven daily. Bearded personnel are to be provided with approved airpark hooded respirators.

2.2.1.5 Full body disposable protective clothing, including head, body and foot coverings (unless using footwear as described in 2.2.1.6) consisting of material impenetrable by asbestos fibers (Tyvek or equivalent) shall be provided to all workers and authorized visitors and sized adequate to accommodate movement without tearing.

2.2.1.6 Additional safety equipment (e.g., hard hats meeting the requirements of ANSI Standard Z89.1-1981, eye protection meeting the requirements of ANSI Standard Z87.1-1979, safety shoes meeting the requirements of ANSI Standard Z41.1-1967, disposable PVC gloves), as necessary, shall be provided to all workers and authorized visitors.

2.2.1.7 Non-skid footwear shall be provided to all abatement workers. Disposable clothing shall be adequately sealed to the footwear to prevent body contamination.

2.2.1.8 No regular clothing is to be worn under disposable protective clothing.

2.2.1.9 A sufficient supply of disposable mops, rags and sponges for work area decontamination shall be provided as needed.

2.2.2 Removal

2.2.2.1 A sufficient supply of scaffolds, ladders, lifts and hand tools (e.g. scrapers, wire cutters, brushes, utility knives, wire saws, etc.) shall be provided as needed.

2.2.2.2 Sprayers with pumps capable of providing 500 pounds per square inch (psi) at the nozzle tip at a flow rate of 2 gallons per minute for spraying amended water.

2.2.2.3 Rubber dustpans and rubber squeegees shall be provided for cleanup.

2.2.2.4 Brushes utilized for removing loose asbestos containing material shall have nylon or fiber bristles, not metal.

2.2.2.5 A sufficient supply of HEPA filtered vacuum systems shall be available during cleanup.

2.2.3 Encapsulation

2.2.3.1 Encapsulation shall be sprayed using airless spray equipment. Nozzle pressure should be adjustable within the 400 to 1500 psi range.

2.2.3.2 Additional support equipment as needed.

2.2.3.3 The nature of the encapsulant may affect the requirements for respiratory protection. Vapors that may be given off during encapsulant application must be taken into account when selecting respirators, if types other than air supplied are used.

2.2.4 Enclosure

2.2.4.1 Hand tools equipped with HEPA filtered local exhaust ventilation shall be utilized during the installation of enclosures and supports if there is any need to disturb asbestos.

2.2.4.2 Additional support equipment as needed.

2.3 SUBSTITUTIONS

2.3.1 Approval Required:

2.3.1.1 The Contract is based on the materials, equipment and methods described in the Contract Documents.

2.3.1.2 The Consultant/Engineer will consider proposals for substitutions of materials, equipment, procedures and methods only when such proposals are accompanied by full and complete technical data and all other information required by the Engineer/Consultant to evaluate the proposed substitution and submitted as described in the Supplementary Conditions.

2.3.1.3 Do not substitute materials, equipment, or methods unless such substitution has been specifically approved for this work by the Engineer/Consultant/Engineer.

2.3.1.4 The decision of the Consultant/Engineer shall be final.

2.3.2 Availability of specified items:

2.3.2.1 Verify prior to bidding that all specified items and equipment will be available in time for installation and use during orderly and timely progress of the work.

2.3.2.2 In the event that specified items will not be so available, notify the Engineer/Consultant prior to receipt of bids.

2.3.2.3 Costs of delays because of non-availability of specified items, when such delays could have been avoided by the Contractor, will be back-charged as necessary and shall not be borne by the Owner. Possible liquidated damages could apply beyond this could apply also.

3.0 EXECUTION

3.1 Preparation

3.1.1. Work areas

3.1.1.1 Post caution signs meeting the specifications of OSHA 29 CFR 1910.1001 (g) (1) (ii) and Pennsylvania DEP, at any location and approaches to a location where airborne concentrations of asbestos may exceed ambient background levels. Signs shall be posted at a distance sufficiently far enough away from the work area to permit any employee to read the sign and take the necessary protective measures to avoid exposure. Additional signs may need to be posted following construction of workplace enclosure barriers.

3.1.1.2 Shut down and lock out electric power to all work areas. Provide temporary power and lighting. Ensure safe installation (including ground faulting) of temporary power sources and equipment by compliance with all applicable electrical code requirements and OSHA requirements for temporary electrical systems. All costs for electric current shall be paid for by the Contractor.

3.1.1.3 Shut down and lock out all heating, cooling, and air conditioning system (HVAC) components that are in, supply or pass through the work area. Interiors of existing duct work requiring decontamination is to be cleaned during the pre-cleaning phase of operations before the ductwork is sealed off.

Appropriate equipment and control measures shall be utilized to prevent contamination of building spaces during this operation. Adequate cleaning of ductwork may be accomplished by drawing high volumes of air through the system using the HEPA filtered negative pressure ventilation units. Investigate the work area and agree on pre-abatement condition with the Owner and Engineer/Consultant. Seal all intake and exhaust vents in the work area with tape and 6-mil. Polyethylene. Also seal any seams in system components that pass through the work area. Remove all HVAC system disposable filters and place in labeled 6-mil. Polyethylene bags for staging and eventual disposal as asbestos contaminated waste. Wash non-disposable filters.

3.1.1.4 The Contractor may use existing sanitary facilities to be assigned by the Engineer/Consultant for abatement personnel outside of the enclosed work area. Maintain them in a clean and sanitary condition throughout the project.

3.1.1.5 The Owner will provide water for construction purposes. Contractor shall connect to existing Owner system.

3.1.1.6 Pre-clean all movable objects within the work area using a HEPA filtered vacuum and/or wet cleaning methods as appropriate. The Owner's personnel may clean, remove and store movable desks, chairs and furniture in an uncontaminated location. Carpeting is to be cleaned as asbestos contaminated items utilizing HEPA vacuum techniques and steam cleaned by the

Contractor. Drapes are to be removed by the Contractor, bagged, and handed over to the Owner for dry cleaning.

3.1.1.7 Pre-clean all fixed objects in the work area using HEPA filtered vacuums and/or wet cleaning techniques as appropriate. Remove all HVAC covers and panels to clean equipment. Careful attention must be paid to machinery behind grills or gratings where access may be difficult but contamination significant. Also pay particular attention to wall, floor and ceiling penetrations behind fixed items. After pre-cleaning, enclose fixed objects in 6 mil. Polyethylene sheeting double layered and seal securely in place with tape. Objects (e.g. permanent fixtures, shelves, electronic equipment, laboratory tables, sprinklers, alarm systems, closed circuit TV equipment, telephone cables and computer cables) which must remain in the work area are to be properly enclosed after cleaning.

3.1.1.8 Pre-clean all surfaces in the work area using HEPA filtered vacuums and/or wet cleaning methods as appropriate. Do not use any methods that would raise dust such as dry sweeping or vacuuming with equipment not equipped with HEPA filters. Do not disturb asbestos containing materials during the pre-cleaning phase. Remove, clean and wet wash all doors in the work area. Store outside of work area and reinstall doors after clearance.

3.1.1.9 Seal off all windows, doorways elevator openings, corridor entrances, drains, ducts, grills, grates, diffusers, skylights and any other openings between the work area and uncontaminated areas outside of the work area (including the outside of the building, tunnels, and crawl spaces) with 6 mil polyethylene sheeting double layered and tape. (See section 3.1.4)

3.1.1.10 Cover floors in the work area with polyethylene sheeting.

3.1.1.10.1 Floor shall be covered with two layers of 6 mil (minimum) sheeting. Carpeting and hardwood flooring may be damaged by leaks of water, ladder feet, scaffold wheels, etc. Over these floors place one additional layer of protection of plastic sheeting. Additional layers of sheeting may be utilized as drop cloths to aid in cleanup of bulk materials.

3.1.1.10.2 Plastic shall be sized to minimize seams. If the floor area necessitates seams, those on successive layers of sheeting shall be staggered to reduce the potential for water to penetrate to the flooring material. A distance of at least 6 feet between seams is sufficient. Do not locate any seams at wall/floor joints.

3.1.1.10.3 Floor sheeting shall extend at least 12" and 24" up the sidewalls of the work area.

3.1.1.10.4 Sheeting shall be installed in a fashion to prevent slippage between successive layers of material. (Vinyl sheeting may be used for improved traction on floors.)

3.1.1.11 Cover walls in the work area with polyethylene sheeting.

3.1.1.11.1 Walls shall be covered with two (2) layers of 6 mil polyethylene sheeting.

3.1.1.11.2 Plastic shall be sized to minimize seams. Seams shall be staggered and separated by a distance of at least 6 feet.

3.1.1.11.3 Wall sheeting shall overlap floor sheeting by at least 18 and 30 inches beyond the wall/floor joint to provide a better seal against water damage and for negative pressure.

3.1.1.11.4 Wall sheeting shall be secured adequately to prevent it from falling away from the walls. Additional support/attachment is required horizontally at mid-joint for work over 14 ft. High.

3.1.2 Worker decontamination enclosure systems.

3.1.2.1 Worker decontamination enclosure systems shall be provided at all locations where workers will enter or exit the work area. One system at a single location for each contained work area is preferred. These systems may consist of existing rooms outside of the work area, if the layout is appropriate, that can be enclosed in plastic sheeting and is accessible from the work area. When this situation does not exist, enclosure systems may be constructed out of metal, wood or plastic support as appropriate.

3.1.2.2 Plans for construction, including materials and layout, shall be submitted as shop drawings and approved, in writing by the Consultant/Engineer prior to work initiation. Worker decontamination enclosure systems constructed at the work site shall utilize 2 layers of 6 mil opaque black or white polyethylene sheeting or other acceptable materials for privacy. Detailed descriptions of portable, prefabricated units, if used, must be submitted for the Engineer/Consultant's approval. Plans must include floor plan (in accordance with 3.1.2.3) with dimensions, materials, size thickness, plumbing and electrical utilities.

Each airlock shall be clearly identified and separated from the other by crossover sheet doors designed to minimize fiber and air transfer as people pass between areas. Crossover doors to be at least 3 layers of 6 mil polyethylene sheeting weighted at bottom. Doors must be at least 4 feet wide with the distance between sets of flaps at least 4 feet.

3.1.2.3 The worker decontamination enclosure system shall consist of, at least, a clean room, a shower room, and an equipment room, each separated from each other and from the work area by airlocks.

3.1.2.4 Entry to and exit from all airlocks and decontamination enclosure system chambers shall be through curtained doorways consisting of three sheets of overlapping polyethylene sheeting. Two sheets shall be secured at the top and left side, the other sheet at the top and right side.

All sheets shall have weights attached to the bottom to ensure that they hang straight and maintain a seal over the doorway when not in use. Doorway designs, providing equivalent protection and acceptable to the Engineer/Consultant may be utilized.

3.1.2.5 Access between any two rooms in the decontamination enclosure system shall be through an airlock with at least 4 feet separating each curtained doorway. Pathways into (from clean to contaminated) and out from (contaminated to clean) the work area shall be clearly designated.

3.1.2.6 Clean room shall be sized to adequately accommodate the work crew. Benches shall be provided as well as hooks for hanging up street clothes. Security lockers are to be provided for valuables. Shelves for storing respirators shall also be provided in this area. Clean work clothes

(if required under disposable), clean disposable clothing, replacement filters for respirators, disposable clothing, replacement filters for respirators, disposable towels and other necessary items shall be provided in adequate supply at the clean room. A location for postings shall also be provided in this area. Whenever possible, a lockable door shall be used to permit access into the clean room from outside the work area. Lighting, heat and electricity shall be provided as necessary for comfort. This space shall not be used for storage of tools equipment or materials, or as office space.

3.1.2.7 Shower room shall contain one or more prefabricated plastic showers. Compartments are to have shower pan floors. Each shower head shall be supplied with hot and cold water adjustable at the tap. Handheld hose with nozzle not permitted. The shower enclosure shall be constructed to ensure against leakage of any kind. An adequate supply of soap, shampoo, and disposable towels shall always be supplied by the Contractor and available. Shower water shall be drained, collected and filtered through a system with at least 0.5-1.0-micron particle size collection capability. (Note: A system containing a series of several filters with progressively smaller pore sized is recommended to avoid rapid clogging of filtration systems by large particles.)

3.1.2.8 The equipment room shall be used for storage of equipment and tools at the end of a shift after they have been contaminated using a HEPA filtered vacuum and/or wet cleaning techniques as appropriate. Replacement filters (in sealed containers until used) for HEPA vacuums and Negative-Air equipment, extra tools, containers of surfactant and other materials and equipment that may be required during the abatement may also be stored here as needed. A walk-off pan (a small children's swimming pool or equivalent filled with water shall be in the work area just outside the equipment room for workers to clean off foot coverings after leaving the work area and prevent excessive contamination of the worker decontamination enclosure system. A drum lined with a labeled 6 mil polyethylene bag for collection of disposable clothing shall be in this room. Contaminated footwear (e.g., rubber boots, etc.) shall be stored in this area for reuse the following workday.

3.1.3 Waste Container pass-out airlock and emergency exits.

3.1.3.1 The waste container pass-out airlock shall be constructed at some location away from the worker decontamination enclosure system. Whenever possible, this shall be located where there is direct access from the work area to the outside of the building.

3.1.3.2 This airlock system shall consist of an airlock, a container staging area, and another airlock with access to outside the work area.

3.1.3.3 The waste container pass-out airlock shall be constructed in similar fashion to the worker decontamination enclosure system using similar materials and airlock and curtain doorway designs.

3.1.3.4 This airlock system shall not be used to enter or exit the worksite.

3.1.3.5 Emergency exits shall be established and clearly marked with duct tape arrows or other effective designations to permit easy location from anywhere within the work area. They shall be secured to prevent access from uncontaminated areas and still permit emergency exiting. These

exits shall be properly sealed with polyethylene sheeting which can be cut to permit egress if needed. These exits may be the worker decontamination enclosure, the waste pass-out airlock and/or other alternative exits satisfactory to fire officials.

3.1.4 Isolation of the work area from occupied areas of the building.

3.1.4.1 The contaminated work area shall be separated from uncontaminated, occupied areas of the buildings by the construction of airtight barriers.

3.1.4.2 Walls shall be constructed of wood or metal framing to support barriers in all openings larger than 4' x 8'.

3.1.4.3 A sheathing material (plywood, drywall) of at least 3/4" thickness shall be applied to work side of barrier.

3.1.4.4 Cover both sides of partition with a double layer of 6 mil polyethylene sheeting with staggered joints and seal in place.

3.1.4.5 Caulk edges of partition at floor, ceiling, walls, and fixtures to form an airtight seal.

3.1.5 Maintenance of workplace barriers and worker decontamination enclosure systems.

3.1.5.1 Following completion of the construction of all polyethylene barriers and decontamination system enclosures, allow overnight settling to ensure that barriers will remain intact and secured to walls and fixtures before beginning actual abatement activities.

3.1.5.2 All polyethylene barriers inside the workplace, in the worker decontamination enclosure system, in the waste container pass-out airlock and at partitions constructed to isolate the work area from occupied areas shall be inspected at least twice daily, prior to the start of each day's abatement activities. Document inspections and observations in the daily project log.

3.1.5.3 Damage and defects in the enclosure system are to be repaired immediately upon discovery.

3.1.5.4 Use smoke tubes to test the effectiveness of the barrier system when directed by the Engineer/Consultant.

3.1.5.5 At any time during the abatement activities after barriers have been erected, if visible material is observed outside of the work area or if damage occurs to barriers, work shall immediately stop, repairs be made to barriers, and debris/residue cleaned up using appropriate HEPA vacuuming and wet mopping procedures.

3.1.5.6 If air samples collected outside of the work area during abatement activities indicate airborne fiber concentrations greater than 0.01 f/cc. or pre-measured background levels (whichever is lower) work shall immediately stop for inspection and repair of barriers. Clean-up of surfaces outside of the work area using HEPA vacuums or wet cleaning techniques may be necessary. Where possible, filtration units shall be placed directly outside the work area barrier with the entrance port air-tight sealed in the work area.

3.1.5.7 Install and initiate operation of Negative-Air system equipment as needed to provide one air change in the work area at least every 15 minutes. (See section 2.2.1.1). Opening made in the enclosure system to accommodate microtrap units shall be made air-tight with tape and/or caulking as needed. If more than one unit is installed, they should be turned on one at a time, checking the integrity of wall barriers for secure attachment and need for additional reinforcement. Ensure that adequate power supply is available to satisfy the requirements of the microtrap units. Negative-Air filtration units shall be exhausted to the outside of the building whenever feasible.

They shall not be exhausted into occupied areas of the building except as approved by the Engineer/Consultant. Twelve-inch extension ducting shall be used to reach from the work area to the outside when required. Careful installation, air monitoring and daily inspections shall be done to ensure that the ducting does not release fibers into uncontaminated building areas.

3.1.7 Once constructed and reinforced as necessary, with Negative-Air units in operation as required, test enclosure for leakage utilizing smoke tubes. Repair or reconstruct as needed.

3.1.8 Clearly identify and maintain emergency and fire exits from the work area.

3.1.9 Removal of building components

3.1.9.1 After isolation of work area as described in previous sections and initiation of Negative-Air systems, remove, clean and enclose in polyethylene the ceiling mounted objects such as light fixtures, exit signs, speakers and other items that may interfere with the abatement process and were not previously cleaned and sealed off. Utilized localized spraying of amended water and/or HEPA vacuums to reduce fiber dispersal during the removal of these fixtures after cleaning and bagging the items and storing them outside the work area for reinstallation by the Electrical Contractor.

3.1.9.2 Remove suspended ceiling panels within the work area carefully. Panels are to be discarded. It is not necessary to clean them but wrap in a similar fashion and stage for disposal in the waste container pass-out airlock.

3.1.9.3 Suspended ceiling T-grid components is to be removed to perform the abatement. Wrap grid pieces in 6-mil polyethylene sheeting and seal with tape. Dispose of material.

3.1.9.4 Remove insulation from piping, boilers, breaching, vessels, etc.

3.1.10 Commencement of work shall not occur until:

3.1.10.1 Enclosure systems have been constructed and tested.

3.1.10.2 Negative-Air systems are functioning adequately.

3.1.10.3 All pre-abatement submissions, notifications, postings, and permits have been provided and are satisfactory to the Engineer/Consultant (see section 1.6).

3.1.10.4 All equipment for abatement, clean-up and disposal are on hand.

3.1.10.5 All worker training and certification is completed.

3.1.10.6 Contractor receives written permission from the Engineer/Consultant to commence abatement.

3.1.11 Alternative Procedures.

3.1.11.1 Procedures described in this specification are to be always utilized.

3.1.11.2 If specified procedures cannot be utilized, a request must be made in writing to the Engineer/Consultant providing details of the problem encountered and recommended alternatives.

3.1.11.3 Alternative procedures shall provide equivalent or greater protection than procedures that they replace.

3.1.11.4 any alternative procedure must be approved in writing by the Engineer/Consultant prior to implementation.

3.2 WORKPLACE ENTRY AND EXIT PROCEDURES

3.2.1 Personnel entry and exit

3.2.1.1 All workers and authorized personnel shall enter the work area through the worker decontamination enclosure system.

3.2.1.2 All personnel who enter the work area must sign the entry log, located in the clean room, upon entry and exit.

3.2.1.3 All personnel, before entering the work area, shall read and be familiar with all posted regulation, personal protection requirements (including workplace entry and exit procedures) and emergency procedures. A sign-off sheet shall be used to acknowledge that these have been reviewed and understood by all personnel prior to entry.

3.2.1.4 All personnel shall proceed first to the clean room, remove all street clothes, and appropriately do respiratory protection (as specified), fit test respirator, and launderable and/or disposable coveralls, head covering and foot covering. Hard hats, eye protection and gloves shall also be utilized if required. Clean respirators and protective clothing shall be provided and utilized by each person for each separate entry into the work area.

3.2.1.5 Personnel wearing designated personal protective equipment shall proceed from the clean room through the shower room and equipment room to the main work area.

3.2.1.6 Before leaving the work area all personnel shall remove gross contamination from the outside of respirators and protective clothing by brushing and/or wet wiping procedures. (Small HEPA vacuum; with brush attachments may be utilized for this purpose, however, larger machines may tear the suits). Each person shall clean bottoms of protective footwear in the walk-off pan just prior to entering the equipment room.

3.2.1.7 Personnel shall proceed to equipment room where they remove all protective equipment except respirators. Deposit disposable (and launderable) clothing into appropriately labeled containers for disposal (and laundering).

3.2.1.8 Reusable, contaminated footwear shall be stored in the equipment room when not in use in the work area. Upon completion of abatement, it shall be disposed of as asbestos contaminated waste. (Rubber boots may be decontaminated at the completion of the abatement for reuse.)

3.2.1.9 Still wearing respirators, personnel shall proceed to the shower area, clean the outside of the respirators and the exposed face area under running water prior to removal of respirator and shower and shampoo to remove residual asbestos contamination. Various types of respirators will require slight modification of these procedures. An airline respirator with HEPA filtered disconnect protection may be disconnected in the equipment room and work into the shower. A powered air-purifying respirator face-piece will have to be disconnected from the filter/power pack assembly, which is not waterproof, upon entering the shower. A dual cartridge respirator may be worn into the shower. Cartridges must be replaced for each new entry into the work area.

3.2.1.10 After showering, cleaning fingernails, and drying off, proceed to the clean room and don clean disposable and/or launderable clothing if there will be later re-entry into the work area or street clothes if it is the end of the work shift.

3.2.1.11 These procedures shall be posted in the clean room and equipment room.

3.2.2 Waste container pass-out procedures

3.2.2.1 Asbestos contaminated waste that has been containerized shall be transported out of the work area through the waste container pass-out airlock (or through the worker decontamination enclosure if a separate airlock has not been constructed.)

3.2.2.2 Waste pass-out procedures shall utilize two teams of workers, an “inside” team and an “outside” team.

3.2.2.3 The inside team wearing appropriate protective clothing and respirators for inside the work area shall clean the outside, including bottoms, or properly labeled containers (bags, drums, or wrapped components) using HEPA vacuums and wet wiping techniques and transport them into the waste container pass-out airlock. No worker from the inside team shall further exit the work area through this airlock.

3.2.2.4 The outside team, wearing a different color protective clothing and appropriately assigned respirators, shall enter the airlock from outside the work area, enclose the bags, drums, or wrapped components in clean, labeled, 6 mil polyethylene bags and remove them from the airlock to the outside. No worker from the outside team shall further enter the work area through this airlock.

3.2.2.5 The exit from this airlock shall be secured to prevent unauthorized entry.

3.3. PERSONNEL PROTECTION REQUIREMENTS

3.3.1 Training

3.3.1.1 Prior to commencement of abatement activities all personnel who will be required to enter the work area or handle containerized asbestos containing materials must have received adequate training in accordance with Part 4 Section 4.1 of this document.

3.3.1.2 Special on-site training on equipment and procedures unique to this job site shall be performed as required.

3.3.1.3 Training in emergency response and evacuation procedures shall be provided.

3.3.2 Respiratory Protection

3.3.2.1 All respiratory protection shall be provided to workers in accordance with the submitted written respiratory protection program, which includes all items in OSHA 29 CFR 1910.134, June 20, 1986. This program shall be posted in the clean room of the worker decontamination enclosure system.

3.3.2.2 Workers shall be provided with personally issued, individually identified (marked with waterproof designations) respirators.

3.3.2.3 Respirators shall be selected that meet the following level of protection requirements:

Type “C” air-supplied respirators in positive pressure or pressure demand mode with full facepieces and HEPA filtered disconnected protection are to be provided to all full-shift asbestos abatement workers. Powered air-purifying respirators equipped with HEPA filtration and full facepieces may be utilized for inspection or repair work of less than one (1) hour duration and for Glove bag removal. (See Section 2.2.1.2)

3.3.2.4 Fit testing

3.3.2.4.1 Workers must perform positive and negative air pressure fit tests each time a respirator is put on, whenever the respirator design so permits. Powered air-purifying respirators shall be tested for adequate flow as specified by the manufacturer.

3.3.2.4.2 Workers shall be given a qualitative fit test in accordance with procedures detailed in the OSHA Lead Standard (29 CFR 1910.1025, Appendix D, Qualitative Fit Test Protocols) for all respirators to be used on the abatement project. An appropriately administered quantitative fit test may be substituted for the qualitative fit test.

3.3.2.4.3 Documentation of adequate respirator fit must be provided to the Engineer/Consultant.

3.3.2.5 No one wearing a beard shall be permitted to don a respirator and enter the work area. Workers must be clean shaven or use stage II type respirators.

3.3.2.6 Additional respirators (minimum of 2 of each type) and training on their donning and use must be available at the work site for authorized visitors who may be required to enter the work area.

3.3.3 Protective Clothing

3.3.3.1 Disposal clothing including head, foot and full body protection shall be provided in sufficient quantities and adequate sizes for all workers and authorized visitors.

3.3.3.2 Hard hats, protective eyewear, gloves, rubber boots and/or other footwear shall be provided as required for workers and authorized visitors. Safety shoes may be required for some activities.

3.4 REMOVAL

3.4.1 Clean and isolate the work area in accordance with Section 3.1.

3.4.2 Wet all asbestos containing material with an amended water solution using equipment capable of providing a fine spray mist, to reduce airborne fiber concentrations when the material is disturbed. Saturate the material to the substrate, however, do not allow excessive water to accumulate in the work area. Keep all removed material wet enough to prevent fiber release until it can be containerized for disposal.

If work area temperatures are below 32 Degrees F and amended water is subject to freezing, dry removal permits, and procedures must be utilized (See 2.1.2.1). Maintain a high humidity in the work area by misting or spraying to assist in fiber settling and reduce airborne concentrations. Wetting procedures are not equally effective on all types of asbestos containing materials but shall none-the-less be used in all cases.

3.4.3 Saturated asbestos containing material shall be removed in manageable sections. Removed material should be containerized before moving to a new location for continuance of work. Do not permit material to accumulate. Containerize material at the end of each work shift. Surrounding areas shall be periodically sprayed and maintained in a wet condition until visible material is cleaned up.

3.4.4 Material removed from building structures or components shall not be dropped or thrown to the floor. Material should be removed as intact sections or components whenever possible and carefully lowered to the floor. If this cannot be done for materials greater than 12 ft. above the floor, a dust-tight chute shall be constructed to transport the material to containers on the floor or the material may be containerized at elevated levels (e.g. on scaffolds) and carefully lowered to the ground by mechanical means. For materials between 12 and 50 feet above the ground they may be containerized at elevated levels or dropped onto inclined chutes or scaffolding for subsequent collection and containerization.

3.4.5 Containers are to be 6 mil polyethylene bags or drums and shall be sealed when full. Double bagging of waste material is required. Bags shall not be overfilled. They should be securely sealed to prevent accidental opening and leakage by tying tops of bags in an overhand knot or by taping in gooseneck fashion. Do not seal bags with wire or cord. Bags may be placed in drums for staging and transportation to the landfill. Bags shall be decontaminated on exterior surfaces by wet cleaning and HEPA vacuuming before double bagging or being placed in clean drums and sealed with locking ring tops. Double bagging is to take place in the waste transfer airlock.

3.4.6 Large components removed intact may be wrapped in 2 layers of 6 mil polyethylene sheeting labeled and secured with tape for transport to the landfill. All joints must be sealed.

3.4.7 Asbestos containing waste with sharp-edged components e.g. nails, screws, etc. will tear the polyethylene bags and sheeting and shall be placed in drums for disposal. Drums are to be placed in polyethylene bags and labeled.

3.4.8 After completion of all stripping work, surfaces from which asbestos containing materials have been removed shall be wet brushed and sponged or cleaned by some equivalent method to remove all visible residue.

3.4.9 Clean-up shall proceed in accordance with Section 3.12

3.4.10 After the work area has been rendered free of visible residues and approved in writing by the Consultant/Engineer, a coat of the specified encapsulating agent shall be applied to all surfaces in the work area including structural members, building components, walls and construction above ceilings, and plastic sheeting on walls, floors and covering non-visible residue. Encapsulate all piping and vessel joints, threads, elbows, bends, and unions.

3.5 CLEAN UP PROCEDURES

3.5.1 Remove and containerize all visible accumulations of asbestos containing material and asbestos contaminated debris utilizing rubber dust pans and rubber squeegees to move material around. Do not use metal shovels to pick up or move accumulated waste. Special care shall be taken to minimize damage to floor sheeting.

3.5.2 Wet clean all surfaces in the work area using rags, mops, and sponges as appropriate. Pick up excess water and gross wet debris with HEPA vacuum.

3.5.3 Remove the cleaned outer layer of plastic sheeting from walls and floors. Windows, doors, HVAC system vents and all other openings shall remain sealed. The Negative-Air units shall remain in continuous operation. Decontamination enclosure systems shall remain in place and be utilized.

3.5.4 After cleaning the work area, wait at least 24 hours to allow fibers to settle and HEPA vacuum and wet clean all objects and surfaces in the work area again.

3.5.5 Remove all containerized waste from the work area and waste container pass-out airlock.

3.5.6 Decontaminate all tools and equipment and remove at the appropriate time in the cleaning sequence.

3.5.7 Inspect the work area for visible residue. If any accumulation of residue is observed, it will be assumed to be asbestos and the 24-hour settling period/cleaning cycle repeated.

3.5.8 The work area shall be cleaned until it is following State and Local requirements and any more stringent criteria agreed upon by the Contractor and the Owner prior to initiation of abatement activities (criteria should be in the form of visual inspections and airborne fiber concentrations). Additional cleaning cycles shall be provided, as necessary, at no cost to the Owner until these criteria have been met.

3.5.9 Following the satisfactory completion of clearance air monitoring and a Certificate of Completion signed by State and Local authorities, remaining barriers may be removed and properly disposed of. A final visual inspection by the Engineer/Consultant shall insure that no contamination remains in the work area. Unsatisfactory conditions may require additional cleaning and air monitoring.

3.6 CLEARANCE AIR MONITORING

3.6.1 Following the completion of clean-up operations, the Contractor shall notify the Engineer/Consultant that work areas are ready for clearance air monitoring.

3.6.2 The Engineer/Consultant shall then arrange for an Air Monitoring Professional to sample the air in the work area for airborne fiber concentrations.

3.6.3 The Engineer/Consultant shall then arrange for an Air Monitoring Professional to sample the air in the work area for airborne fiber concentrations. The use of TEM (Transmission Electron Microscopy) for post air monitoring clearance will be utilized. Procedures and methods for TEM must meet AHERA requirements by a certified lab.

ABATEMENT CLEARANCE CRITERIA

- Following the completion of final clean-up operations, notify the Project Environmental Consultant that work areas are ready for final inspection and clearance air monitoring.
- Project Environmental Consultant will then sample the air in the work area for airborne fiber concentrations.
 - Removal areas with less than 160 square feet of removed material, the samples will be analyzed using Phase Contrast Microscopy (PCM) utilizing the NIOSH 7400 method. Minimum of five samples from inside the work area will be collected. Clearance will be issued when all samples' results show that the airborne fiber concentrations inside the abatement work area are equal to or less than 0.01f/cc or the background level, whichever is greater.
 - Removal areas with greater than 160 square feet or 260 linear feet of removed material, the samples will be analyzed using Transmission Electron Microscopy (TEM). Minimum of five samples from inside the work area will be collected. If the arithmetic mean of their asbestos structure concentrations per square millimeter is less than or equal to 70 structures per square millimeter, the asbestos removal and clean-up activities within the work area will be deemed to have been completed.
 - If these conditions are not met, decontamination shall be deemed incomplete, and the cleaning procedures shall be repeated. The area shall be re-cleaned and re-tested at no additional cost to Owner until satisfactory levels are obtained.
 - For lead-based removal work, wipe sampling shall be performed within the controlled work areas following completion of demolition work. Release Criteria: Decontamination of the work area is complete when at least one representative sample per work area is analyzed and reveals lead concentrations below 40 micrograms of lead per square foot of area on interior floors, 250 micrograms of lead per square foot of area on window channels/sills and 800 micrograms of lead per square foot of area on exterior floors. If these conditions are not met, then the decontamination is incomplete and the cleaning procedures shall be repeated. The area shall be re-tested at no additional cost to Owner until satisfactory levels are obtained.

- For removal/demolition of lead-based painted components where the component was removed intact, without creating a disturbance to the LBP, clearance will be issued upon passing of a final visual inspection completed.
- ENVIRONMENTAL MONITORING - Air monitoring will be carried out by the Project Environmental Consultant on behalf of the Owner to verify that the building beyond the contamination area and the outside environment remains uncontaminated.
 - Area Air Monitoring: The Project Environmental Consultant will conduct in-progress air monitoring daily to determine area airborne contaminant concentrations within the confines of the work area. Environmental Air Sampling: Ambient air samples are taken and analyzed to indicate fiber migration from containment to the environment. Should any environmental sample outside work areas exceed the base line of 0.01 f/cc of air or established background concentrations as determined by PCM analysis, all work will immediately halt except for corrective work. The engineer shall determine the source of the high fiber count and notify the contractor with directions for the corrective action.

The air sampling shall also be conducted using sampling pumps calibrated at a flow rate of at least two (2) and not more than ten (10) liters per minute using collection media and procedures in accordance with NIOSH Standard Analytical Method P&CAM 239 or 7400, as required. Air volumes shall be sufficient to provide reliable results down to a concentration of 0.010 fibers per cubic centimeter of air (f/cc) or lower. Minimum air volumes of 3000 liters shall be collected for P&CAM 239 and 1000 liters for method 7400. Volume requirements for electron microscope methods should be discussed with the analytical laboratory. Final decisions will be made by the Engineer/Consultant.

3.6.4 The number of samples that are required and the specific locations will be established by the Engineer/Consultant, and air monitor firm.

3.6.5 Aggressive sampling shall be performed with portable fans circulating air in the work area to stimulate actual use conditions. Negative-Air units shall not be utilized for this purpose. The air monitoring firm will provide said equipment.

3.6.6 Air samples shall be analyzed by Transmission Electron Microscopy (TEM)

3.6.7 All samples at all locations shall indicate concentrations of airborne fibers less than 0.010 f/cc for release of the work area, as predetermined by the baseline samples obtained prior to the start of the project.

3.6.8 Areas exceeding this level shall be re-cleaned and retested until satisfactory levels are obtained.

3.6.9 All deficiencies in asbestos removal and clean-up found during the final visual inspection of the area must be corrected by the Asbestos Abatement Contractor. Final air testing, laboratory methodology will be by Transmission Electron Microscopy. The final air test results are to be less than: 70 structures /MM² or ambient levels, whichever is higher, as fibers per cubic centimeter

(cc) or air, 5 microns in length, or more. In case the final air test specifications of 0.010 f/cc or ambient levels, whichever is higher, asbestos fibers per cc of air are not met, the Asbestos Abatement Contractor must re-clean the affected areas and call for additional air sampling by the Engineer/Consultant.

The additional cleaning and air sampling shall be at the Asbestos Abatement Contractor's expense. The professional fee for the additional air testing by the Engineer/Consultant is to be charged to the Contractor. NOTE: AHERA TEM REQUIREMENTS APPLY TO THIS PROJECT.

3.6.10 Barriers are to remain in place and work areas are to remain sealed off until acceptable laboratory analysis of final test cassettes are received by the Engineer/Consultant and a signed Certificate of Completion has been obtained.

3.7 DISPOSAL PROCEDURES

3.7.1 As the work progresses, to prevent exceeding available storage capacity on site, sealed and labeled containers of asbestos containing waste shall be removed and transported to the prearranged disposal location.

3.7.2 Disposal must occur at an authorized site in accordance with regulatory requirements of NESHAP and applicable State and Local guidelines and regulations.

3.7.3 All dump receipts, trip tickets, transportation manifests or other documentation of disposal shall be delivered to the Engineer/Consultant. A recommended recordkeeping format utilizes a chain of custody form which includes the names and addresses of the Generator (Owner), Contractor, pickup site, and disposal site, the estimated quantity of the asbestos waste and the type of containers used. The form should be signed by the Generator, the Contractor, and the Disposal Site Operator, as the responsibility for the material changes hands. If a separate hauler is employed, his name, address, telephone number and signature should also appear on the form.

3.7.4 Transportation to the landfill.

3.7.4 Once drums, bags and wrapped components have been removed from the work area, they shall be loaded into an enclosed truck or dumpster for transportation. Truck or dumpster should be posted and be equipped with a secure padlock.

3.7.4.2 When moving containers, utilize hand trucks, carts and proper lifting techniques to avoid back injuries. Trucks with lift gates are helpful for raising drums during truck loading.

3.7.4.3 The enclosed cargo area of the truck shall be free of debris and lined with 6 mil polyethylene sheeting to prevent contamination from leaking or spilled containers. Floor sheeting shall be installed first and extended up the sidewalls. Wall sheeting shall be overlapped and taped into place.

3.7.4.4 Drums shall be placed on level surfaces in the cargo area and packed tightly together to prevent shifting and tipping. Large structural components shall be secured to prevent shifting and bags placed on top. Do not throw containers into truck cargo area or dumpster.

3.7.4.5 Personnel loading asbestos containing waste shall be protected by disposal clothing including head, body and foot protection and at a minimum, half-facepiece, air-purifying, dual cartridge respirators equipped with high efficiency filters.

3.7.4.6 Any debris or residue observed on containers or surfaces outside of the work area resulting from clean-up or disposal activities shall be immediately cleaned up using HEPA filtered vacuum equipment and/or wet methods as appropriate.

3.7.4.7 Dumpsters should have doors or tops that can be closed and locked to prevent vandalism or other disturbances of the bagged asbestos debris and wind dispersion of asbestos fibers. Un-bagged material shall not be placed in these containers, nor shall it be used for non-asbestos waste. Bags shall be placed, not thrown, into these containers to avoid splitting.

3.7.5 Disposal at the landfill

3.7.5.1 Upon reaching the landfill, trucks are to approach the dump location as closely as possible for unloading of the asbestos containing waste.

3.7.5.2 Bags, drums and components shall be inspected as they are off-loaded at the disposal site. Material in damaged containers shall be repacked in empty drums or bags as necessary.

3.7.5.3 Waste containers shall be placed on the ground at the disposal site, not pushed or thrown out of trucks (weight of wet material could rupture containers).

3.7.5.4 Personnel off-loading containers at the disposal site shall wear protective equipment consisting of disposable head, body and foot protection and, at a minimum, half-facepiece, air-purifying, dual cartridge respirators equipped with high efficiency filters.

3.7.5.5 Following the removal of all containerized waste, the truck cargo area shall be decontaminated using HEPA vacuums and/or wet methods to meet the no visible residue criteria. Polyethylene sheeting shall be removed and discarded along with contaminated cleaning materials and protective clothing, in bags or drums at the disposal site.

3.7.5.6 If landfill personnel have not been provided with personal protective equipment for the compaction operation by the landfill operator, Contractor shall supply protective clothing and respiratory protection for the duration of this operation.

3.8 RE-ESTABLISHMENT OF THE WORK AREA AND SYSTEMS

3.8.1 Re-establishment of the work area shall only occur following the completion of clean-up procedures and after clearance air monitoring has been performed and documented to the satisfaction of the Engineer/Consultant.

3.8.2 Polyethylene barriers shall be removed from walls and floors at this time, maintaining decontamination enclosure systems and barriers over doors, windows, etc. as required.

3.8.3 The Contractor and Engineer/Consultant shall visually inspect the work area for any remaining visible residue. Evidence of contamination will necessitate additional cleaning requirements.

- 3.8.4 Additional air monitoring shall be performed if additional clean-up is necessary.
- 3.8.5 Following satisfactory clearance of the work area, remaining polyethylene barriers may be removed and disposed of as asbestos contaminated waste.
- 3.8.6 At the discretion of the Engineer/Consultant, mandatory requirements for personal protective equipment may be waived following the removal of all barriers.
- 3.8.7 Re-secure mounted objects removed from their former positions during area preparation activities.
- 3.8.8 Relocate objects that were removed to temporary locations back to their original positions.
- 3.8.9 Reestablish HVAC, mechanical and electrical systems in proper working order. Remove contaminated HVAC system filters and dispose of as asbestos contaminated waste. Decontaminate filter assembly using HEPA vacuums and wet cleaning techniques. Install new filters in HVAC systems. Dispose of old filters.
- 3.8.10 Repair all areas of damage that occurred as a result of abatement activities. Repair costs will be responsibility of contractor.

4.1 TRAINING

4.1.1 Training shall be provided by the Contractor to all employees or agents who may be required to disturb asbestos containing or asbestos contaminated materials for abatement and auxiliary purposes and to all supervisory personnel who may be involved in planning, execution, or inspection of abatement projects. Course of training and Work Permits issued by the State must be acceptable to the Engineer/Consultant.

4.1.2 Training shall provide, at a minimum, information on the following topics:

4.1.2.1 The health hazards of asbestos including the nature of various asbestos related diseases, routes of exposure, known dose-response relationships, the synergistic relationship between asbestos exposure and cigarette smoking, latency periods for disease and health basis for standards.

4.1.2.2 The physical characteristics of asbestos including fiber size, aerodynamic properties, physical appearance and uses.

4.1.2.3 Employee personal protective equipment including the types and characteristics of respirator classes, limitations or respirators, proper selection, inspection, donning, use, maintenance and storage of respirators, field testing the face-piece-to-face seal (positive and negative pressure fitting tests), qualitative and quantitative fit testing procedures, variations between laboratory and field fit factors, factors that affect respirator fit (e.g. facial hair), selection and use of disposable clothing, use and handling of launderable clothing, non-skid shoes, gloves, eye protection and hard hats.

4.1.2.4 Medical monitoring requirements for workers including required and recommended tests, reasons for medical monitoring and employee access to records.

4.1.2.5 Air monitoring procedures and requirements for workers including description of equipment and procedures, reasons for monitoring, types of samples and current standards with recommended changes.

4.1.2.6 Work practices for asbestos abatement including purpose, proper construction and maintenance of air-tight plastic barriers, job set-up of airlocks, worker decontamination systems and waste transfer airlocks, posting of warning signs, engineering controls, electrical and ventilation system lockout, proper working techniques, waste clean-up, storage and disposal procedures.

4.1.2.7 Personal hygiene including entry and exit procedures for the work area, use of showers and prohibition of eating, drinking, smoking and chewing in the work area.

4.1.2.8 Special safety hazards that may be encountered including electrical hazards, air contaminants (CO, wetting agents, encapsulant, materials from Owner's operation), fire and explosion hazards, scaffold and ladder hazards, slippery surfaces, confined spaces, heat stress and noise.

4.1.2.9 Workshops affording both supervisory personnel and abatement workers the opportunity to see (and experience) the construction of containment barriers and decontamination facilities.

4.1.2.10 Supervisory personnel shall, in addition, receive training on contract specifications, liability insurance and bonding, legal considerations related to abatement, establishing respiratory protection medical surveillance programs, EPA, OSHA (and State) recordkeeping requirements, and other topics as requested by the Building Owner.

4.1.3 Training must be provided by individuals qualified by virtue of experience and education to discuss the topic areas in 4.2.

4.1.4 Training is to have occurred within 12 months prior to the initiation of abatement activities.

4.1.5 Contractor must document training by providing date of training, training entity, course outline, and names and Qualifications of trainers.

4.2 MEDICAL MONITORING

4.2.1 A work/medical history to elicit symptomatology of respiratory disease.

4.2.2.2 A chest x-ray (posterior - anterior, 14 x 13 inches) evaluated by a certified B-reader.

4.2.2.3 A pulmonary function test, including forced vital capacity (FVC) and forced expiratory volume at one second (FEV), administered and interpreted by a certified Pulmonary Specialist.

4.2.3 Employees shall be given an opportunity to be evaluated by a physician to determine their capability to work safely while breathing through the added resistance of a respirator. Examining physicians shall be aware of the nature of respiratory protective devices and their contributions to breathing resistance. They shall also be informed of the specific types of respirators the employee shall be required to wear and the work he will be required to perform, as well as special workplace conditions such as high temperatures, high humidity, and chemical contaminants to which he may be exposed.

4.3 ASBESTOS PROJECT MANAGER

4.3.1 The Asbestos Project Manager shall be a designated representative engaged by the Owner (also known as Clerk-of-the-Works).

4.3.2 The Asbestos Project Manager shall be able to demonstrate through special education, training, skills, knowledge, or experience satisfactory to the Owner to indicate the ability to carry out the following activities as required:

4.3.2.1 Assist in decision making regarding selection of procedures.

4.3.2.2 Assist in writing contract specifications for the abatement.

4.3.2.3 Assist in evaluation of bids and selection of a contractor.

4.3.2.4 Enforce contract specifications.

4.3.2.5 Tour work area with the Contractor and agree on pre-abatement conditions of the work area.

4.3.2.6 Inspect and sign off on barriers and decontamination enclosure systems.

4.3.2.7 Observe activities at all times during abatement.

4.3.2.8 Meet with the Contractor to review work progress and solve problems or adjust procedures as appropriate.

4.3.2.9 Perform bulk material or air sampling and all workplace inspection clearance inspections for the Owner.

4.3.2.10 Report on abatement to the Owner.

4.3.2.11 Request, review and maintain Contractor submittals.

4.3.2.12 Provide training and/or respirator fit testing to personnel.

4.3.3 The Asbestos Project Manager shall have the authority to stop any job activities if they are not being performed in accordance with applicable regulations or guidelines or the requirements of this specification. These will be reported to the Engineer/Consultant with description of activity, reason for stopping it and alternatives for correcting the problem.

4.3.4 The Asbestos Project Manager shall be covered by adequate liability insurance to protect against errors and omissions in the performance of support activities.

4.4 AIR SAMPLING PROFESSIONAL (ASP)

4.4.1 The Air Sampling Professional shall conduct all air sampling for the Owner/Owner's Agent Engineer or Engineer/Consultant/Project Designer. Contract Documents and Specifications often require more stringent methods and procedures than Pennsylvania Act 194 in which case, the more stringent will apply. The ASP Firm and the ASPs are responsible as experts and professionals for state-of-the-art and prudent person generally accepted practices in the air monitoring, testing, safety and reporting of asbestos safety and health hazards.

4.4.2 The ASP shall conduct air sampling in accordance with the NIOSH Standard Analytical Method for Asbestos in Air P&CAM 239 and/or Method 7400 or other acceptable methods as otherwise agreed upon, including AHERA TEM requirements. Management International recommends using NIOSH method # 7400.

4.4.3 It is recommended that the following schedule be utilized for air sampling during the project (in addition to OSHA compliance monitoring supplied by contractor):

4.4.3.1 Pre-abatement sampling - A sufficient number of air samples shall be collected prior to the start of abatement activities in order to determine prevalent airborne concentrations. Samples should be taken both inside and outside of the work area and on the exterior of the buildings to establish existing levels under normal activity conditions.

4.4.3.2 Sampling during the abatement project.

4.4.3.2.1 The following schedule of samples shall be required on a minimum daily basis, once abatement activities begin: Area Samples (inside work area) 3 Personal Samples (inside work area by contractor) 3 Area Samples (outside the work area in uncontaminated area of the building. One of these shall be at the entrance to the worker decontamination enclosure). 1 Area Sample (outside the building) 2 Area Samples (at the exhaust of Negative-Air equipment)

4.4.3.2.2 Samples shall be collected at a sampling rate of 5 to 8 liters/min. A minimum acceptable air volume is 650 to 800 liters.

END SECTION

PRIME CONTRACTOR CERTIFICATION

District/CTC:	Project Name:	PDE Project #:
---------------	---------------	----------------

*** THIS FORM MUST BE PREPARED AND SIGNED BY THE LOW BIDDER ***

*Include the cost for insurance provided by the contractor
as part of the bid or quoted subsequent to bid opening

PRIME CONTRACT FOR: _____

TOTAL CONTRACT AMOUNT FOR NEW CONSTRUCTION AND ALTERATIONS

A. New Construction on Project Building (costs associated with new project building or additions to existing project building)	\$ _____
B. Alterations to Existing Project Building (costs associated with renovating existing structures, including internal or partial demolition and asbestos abatement)	\$ _____
C. Total Demolition of Entire Existing Structures and Related Asbestos Removal (Complete only if a new building is being constructed <u>and</u> an <u>entire</u> existing structure is being demolished)	\$ _____
Total Contract Amount (must equal total base bid plus accepted alternates)	\$ _____

DETAILED CONSTRUCTION COST BREAKDOWN OF COSTS REPORTED ABOVE

TO DETERMINE THIS PROJECT'S COMPLIANCE WITH APPLICABLE REQUIREMENTS AND ACCURATELY CALCULATE STATE REIMBURSEMENT, THE FOLLOWING CRITICAL INFORMATION MUST BE PROVIDED. ONLY REPORT IF INCLUDED IN LINES A OR B ABOVE.	NEW BUILDING / ADDITIONS / SITE FEATURES	ALTERATIONS TO EXISTING BUILDING / SITE FEATURES
Site Development (including rough grading to receive the building, excavation, grouting or shoring, sedimentation control, landscaping, paving for sidewalks, parking lots and driveways, construction of playgrounds and athletic fields, street and parking lot lighting, access or vehicular roads, utilities on site, and extension of utilities to site). Also refer to Part G Instructions for Page G04 for definition for Site Development.		
Sanitary Sewage Disposal (excluding tap-in fee and reserve capacity charges). Sanitary sewage disposal is defined as a new sewage system or plant, the modification or replacement of an existing system or plant, or the extension of sanitary sewer lines from five feet outside the project building to connect to a DEP-approved municipal system.		
Tap-In Fee and/or Reserve Capacity Charges for Sanitary Sewage Disposal (if included)		
Roof Replacement/Repair (include asbestos removal related to roof repair)	X X X X X	
Asbestos Abatement	X X X X X	

ADDITIONAL STRUCTURE COST BREAKDOWNS FOR PROJECT BUILDING -
REQUIRED ONLY IF SPECIAL SESSION ACT 1 OF 2006 (PROPERTY TAX RELIEF) APPLIES;
ONLY REPORT COSTS IF INCLUDED IN LINES A OR B ABOVE.

Natatorium
District Administration Office
Day Care / Pre-School (non-academic)
Non-District Use (health clinic, public library, etc.)

THE ABOVE INFORMATION IS BASED ON BIDS

Company Name:	Address:	Phone Number:
Prepared By:	Signature:	Date:
Name and Title, Printed or Typed		

SECTION 011000 - SUMMARY OF WORK

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Related Sections: The following Sections contain requirements that relate to this Section:
 - 1. Division 1 Section "Temporary Facilities & Controls" for requirements for temporary utilities, support facilities, and security and protection.

1.3 PROJECT INFORMATION

- A. The following is information related to the Project.
 - 1. Project Location: Additions & Renovations to Coopertown Elementary School
800 Coopertown Road, Bryn Mawr, PA 19010.
 - 2. Owner: School District of Haverford Township
50 East Eagle Road, Havertown, PA 19083
 - 3. Owner's Representative: C.B. Development Services, Inc.
1617 John F. Kennedy Boulevard #1090, Philadelphia, PA
19103
 - 4. Project Consultants:
 - a. Mechanical, Electrical and Plumbing Engineers
Moore Engineering
3637 Columbia Avenue, Lancaster, PA 17603
 - b. Structural Engineer
Baker, Ingram & Associates
1547 Oregon Pike, Lancaster, PA 17601
 - c. Civil Engineer
K and W Engineers
2201 North Front Street, Suite 200, Harrisburg, PA 17110
 - 5. Project Website:
 - a. A project web site (i.e. Newforma or Submittal Exchange), administered by the Architect, will be used for purposes of managing communication and documents during the construction stage.

1.4 WORK COVERED BY CONTRACT DOCUMENTS

- A. The Project consists of limited building demolition & selective demolition of portions of the existing Coopertown Elementary School and construction of additions and renovations. Generally, the project includes the construction of 19,500 square feet of new additions and 65,000 square feet of renovations, for a completed 84,500 square foot facility including associated site work as shown on the contract documents.
- B. Generally, the new construction consists of two primary additions, two (2) load bearing masonry buildings that are one story classroom additions and a one story addition that is steel frame at the main entrance for administration, and main lobby. Steel joists and metal deck, masonry veneer, mechanically attached TPO membrane roofing, aluminum windows, storefront and curtain wall systems, casework and interior finishes along with the specified mechanical, electrical, plumbing and fire protection systems are utilized for the additions.

Renovations include reorganization of select areas of the existing building, new finishes, door replacement, new kitchen, open classroom construction, gymnasium renovations and mechanical, electrical and plumbing construction as indicated on the contract documents.

- C. The Contract Documents, dated March 6, 2025 were prepared for the Project by Crabtree, Rohrbaugh & Associates, 401 E. Winding Hill Road, Mechanicsburg, PA. 17055, phone: (717) 458-0272.

1.5 CONTRACTS

- A. The Project will be constructed under a multiple prime-contracting contract arrangement.
- B. Prime Contracts are separate contracts between the Owner and separate contractors, representing significant construction activities. Each prime contract is performed concurrently with and closely coordinated with construction activities performed on the Project under other prime contracts. The prime contracts for the Project include:

CONTRACT NAME	CONTRACT NUMBER	ABBREVIATION
1. General Construction	3758-1	GC
2. HVAC Construction	3758-2	HVAC
3. Plumbing Construction	3758-3	PC
4. Electrical Construction	3758-4	EC

The Owner reserves the right to award additional prime contracts or to perform construction operations with its own forces on portions of the Project.

- C. Prime Contract Work: Each Prime Contract is summarized as follows:
 - 1. **General Construction Contract 3758-1:** The General Construction Contract includes architectural, civil, and structural construction, plus other construction operations traditionally recognized as General Construction. This Contract also includes

administrative and coordination responsibilities. Work under this prime contract includes, but is not limited to, the following:

- a. All General Construction work indicated on these Contract Documents.
- b. All work as described in the following Specification Sections:

Division 0 – Bidding and Contract Requirements	All Sections
Division 1 – General Requirements	All Sections
Division 2 – Existing Conditions	All General Construction
Division 3 – Concrete	Related Sections and Work
	All Sections
Division 4 – Masonry	All Sections
Division 5 – Metals	All Sections
Division 6 – Wood, Plastics and Composites	All Sections
Division 7 – Thermal and Moisture Protection	All Sections
Division 8 – Openings	All Sections
Division 9 – Finishes	All Sections
Division 10 – Specialties	All Sections
Division 11 – Equipment	All Sections
Division 12 – Furnishings	All Sections
Division 13 – Special Construction	All General Construction
	Related Sections and Work
	All Sections
Division 14 – Conveying Equipment	All Sections
Division 21 and 22 – Plumbing Construction	
*see note 'c' below	No Specific Sections
Division 23 – Heating, Ventilating and Air Cond.	
*see note 'c' below	No Specific Sections
Division 26, 27 & 28 – Electrical Construction	
*see note 'c' below	No Specific Sections
Division 31 – Earthwork	All Sections
Division 32 – Exterior Improvements	All Sections
Division 33 – Utilities	All Sections

- c. Where Specification Sections included in the Scope of this Prime Contract reference provisions of Specification Sections of another Prime Contract, those provisions shall be included in the Work of this Prime Contract as if the referenced Specification Sections are included in their entirety in the Specification Sections for this Prime Contract.
 - i. Work in the General Construction Contract includes all labor, materials, equipment and services necessary for the architectural, civil and structural construction plus other activities traditionally recognized as general construction. Work shall be defined in the Civil (C-Series), Phasing (PHA- Series), Architectural (A-Series), and Structural (S-Series) drawings, and in the General Conditions and Specification Divisions 01 through 14, 31 and 32 of the specifications and all referenced specifications that apply. Work includes Project Coordination and related administration responsibilities. Work of this Contract includes, but is not limited to, the following:

1. Site preparation, including clearing, and earthwork.
2. Site utility work including plumbing and mechanical, excluding site electric and site lighting.
3. Site improvements including: All asphalt paving, concrete curbing, concrete walkways, site development, fencing (chain link and decorative), and vehicle control gates.
4. Sediment and erosion control including assumption of Erosion and Sedimentation Pollution Control permit and responsibilities thereof as co- permit.
5. Poured concrete retaining walls and site segmental retaining walls.
6. Site storm water management system including roof drainage conductors, related earthwork and appurtenances starting from a point five feet beyond building.
7. Fire-suppression system distribution to 12" above floor slab inside the building or as otherwise defined on the Contract documents. Same for domestic water system distribution to 12 " above floor slab inside the building as show. Provide new water meter pit per Aqua's standards as shown on the site plans.
8. Perform all abatement as shown on the Environmental Controls documents included in the bid package with a licensed abatement subcontractor. Abatement contractor final approval is subject to review and approval by the District's environmental consultant ECS. Should the submitted abatement contractor be rejected by ECS GC is to procure another abatement contractor at no additional expense to the owner.
9. Demolition of existing building and existing site demolition including site utilities and site structures.
 - a. Owner will remove all loose furniture in the classrooms and areas of demolition and store it in the hallways while the classrooms are renovated or building areas are demolished. GC Remove all remaining kitchen equipment not being re-used in the new kitchen. Kitchen equipment not used is to be removed by general contractor which is also shown on the drawings by the Kitchen Equipment Supplier (KES) which is part of the General Construction Contract.
 - b. Demolition of the two modular classrooms shown on the plans.
 - c. Demolition of the existing sitework includes, but is not limited to, the parking lot curbs, sidewalks, fencing, site lights and foundations, walls, etc. as shown to complete the new scope of work.
10. Site sanitary drainage starting from a cleanout five feet beyond building or as noted otherwise.
11. Site stairs and railings.
12. Site signs
13. Foundations, including footings and foundation walls.
14. Slabs-on-grade, including earthwork, sub drainage systems, and insulation.

15. Below-grade building construction, including excavation, backfill, and thermal and moisture protection.
16. New additions building pad.
17. Line stripping, exterior panel signs, and landscaping.
18. Provide field surveys of as-built site improvement work in accordance with township requirements and all Delaware County Conservation District requirements per the link here <http://www.depgreenport.state.pa.us/elibrary/GetFolder?FolderID=3668>. All improvements must be as-built.
19. surveyed in detail. Provide certification that work is located in accordance with the drawings. Confirm the building steel structure upon completion is plumb and level via a licensed surveyor.
20. Superstructure, including floor and roof construction.
21. Exterior closure, including walls, parapets, doors, windows, entrance and storefront systems and curtain wall systems.
22. Roofing, including coverings, flashings and roof specialties. Coordinate and locate roof drains installed by PC.
23. Conveying systems.
24. Exposed sealants.
25. Partition fire-resistive joint systems.
26. Fire stopping for openings not related to work of other Contracts.
27. Interior construction, including partitions, doors, interior glazed openings, and fittings.
28. Furnishings, including casework, window treatments and seating.
29. Roll down doors, grilles, and projection screens.
30. Fire doors.
31. Fire-protection specialties.
32. Stairs, including railings and finishes.
33. Interior finishes, finish carpentry, built-in casework, and architectural woodwork.
34. Miscellaneous items, including painting of any exposed structural, mechanical, plumbing, and electrical work.
35. Equipment including stage curtains.
36. Kitchen Equipment.
37. Obtain all final sign offs by authorities having jurisdiction including obtaining temporary and final Certificates of Occupancy.
38. Remove, abandon, fill existing piping no longer in use including storm water and sanitary piping. All piping under the new additions called out to be demolished must be completely removed and install structural fill per the geo tech report.
39. Install all access panels required by other prime contractors.
40. GC to provide and install all wood blocking to level up roof curbs provided by the other Primes. Other Primes must layout where the wood blocking is required and the height that is required. GC to coordinate height to ensure the appropriate flashing details for the existing and new roof are met per manufacturer's warranty requirements.
41. GC to cut all openings in roof and floor larger than 10 inches. All openings smaller than 10 inches are to be cut in by the other Primes or

provide sleeves prior to pouring any concrete slabs.

42. GC to include all temporary shoring as required to install lintels for new openings in existing walls. This work is to be a delegated design by a licensed shoring engineer as part of the scope of the GC.
43. Provide final cleaning of the building including all the interior and exterior facades.
44. Work must be complete, operational and tested to meet the requirements of state and local codes.

2. **HVAC Construction Contract 3758-2:** The Heating, Ventilating, and Air-Conditioning Contract includes the furnishing and installation of the heating, ventilating, and air-conditioning systems and the temperature control system, plus other construction operations traditionally recognized as HVAC Construction. Work under this prime contract includes, but is not limited to, the following:

- a. All HVAC Construction work indicated on these Contract Documents.
- b. All work described in the following Specification Sections:

Division 0 – Bidding and Contract Requirements	All Sections
Division 1 – General Requirements	All Sections
Divisions 2 through 14 – General Construction	No Specific Sections*
*see note 'c' below	
Divisions 21 and 22 – Plumbing Construction	No Specific Sections*
*see note 'c' below	
Division 23 – Heating, Ventilating and Air Cond.	All Sections
Divisions 26, 27 & 28 - Electrical Construction	No Specific Sections*
*see note 'c' below	
Divisions 31, 32 & 33 – General Construction	No Specific Sections*
*see note 'c' below	

- c. Where Specification Sections included in the Scope of this Prime Contract reference provisions of Specification Sections of another Prime Contract, those provisions shall be included in the Work of this Prime Contract as if the referenced Specification Sections are included in their entirety in the Specification Sections for this Prime Contract.

Work in the Mechanical Contract shall include all labor, material, equipment and services necessary for the complete construction of all heating, ventilating, and air conditioning Work and Work of other ducted systems shown on Mechanical (M-Series) drawings and described in the General Conditions and Specifications Divisions 01 and 23 and all referenced specifications that apply. Work in the Mechanical Contract includes, but is not limited to, the following:

1. HVAC Distribution including ductwork, air outlets and inlets, and duct accessories.
2. Heat Generation.
3. Refrigeration.
4. Chilled and hot water piping distribution.
5. Air terminal and packaged units.
6. Building automation system, including wiring.

7. All Mechanical Testing, Adjusting and Balancing.
8. General exhaust systems including associated power ventilators.
9. HVAC systems and equipment.
10. Remove existing units shown to be turned over to the owner. Assist loading equipment on to trucks of the district's maintenance department.
11. Roof curbs and all required blocking. Mechanical Contractor shall furnish curbs as required for all roof-mounted equipment. MC to set all their own roof curbs on wood blocking. Wood blocking at roof openings to be installed only by General Contractor. MC to Coordinate blocking locations and requirements with General Contractor.
12. Mechanical connections to equipment furnished by the General Construction Contract Plumbing Contract and Electrical Contract.
13. Concrete equipment bases (pads) required by Mechanical Work.
14. Hoisting required for contract work.
15. Kitchen cooking exhaust fan and ductwork including ansul fire protection systems.
16. Provide de-watering of excavations for Work of this Contract.
17. Provide Operation and Maintenance instruction manuals and specified training to the Owner including video taping of sessions.
18. Provide layout for the General Contractor indicating all openings in the new floor and roof decks that have dimensions larger than 10". Openings with dimensions smaller than 10" shall be provided and installed by the Mechanical Contractor. All other framing, lintels, miscellaneous supports, etc., required but not specifically shown on the Drawings shall be by this Contractor.
19. Provide protection of structure, finishes, and landscaping from damage resulting from the Work of the Contract. Repair any damage promptly to the satisfaction of the Owner.
20. Provide painting for "touch up" required to restore "factory finished" equipment and material to its original condition.
21. Provide all Mechanical work as shown or specified but not limited to vibration isolation, Mechanical equipment, heat recovery units, condensing units, pipe, piping systems, pipe insulation, water treatment, rooftop units, condensers and accessories, air distribution outlets and air handlers, fan coil units, fire and smoke dampers, inspections, identification, roof ventilators, curbs, fans, unit and cabinet heaters, terminal equipment, pumps hangers, support pipe anchors, supports unless designated specifically by the General Contractor, wall sleeves and flashing, etc.
22. Install ductwork in accordance with the latest recommendations of ASHRAE and SMACNA.
23. Provide testing and cleaning of distribution systems and equipment and final inspection.
24. Coordinate connections of equipment, dampers, etc. as required to the fire alarm system with the Electrical Contractor.
25. Provide identification of equipment, valves, piping, and ductwork as required.
26. Provide all cutting, patching, excavation, bedding, backfill, etc., as

necessary to install the Work of this Contract.

27. Provide any housekeeping and equipment pads required for equipment (interior or exterior) that are required for the work of this Contract, but not shown on Architectural, Civil, or Structural Drawings. General Contractor is to provide all housekeeping and equipment pads shown on Architectural, Civil, and Structural Drawings.
28. Furnish any embeds required to be cast in concrete or masonry to the appropriate Prime Contractor that would not be considered part of the building structure or any wall assembly but required as a result of this contract.
29. Provide any miscellaneous structural framing and decking as required to ensure a complete installation of items that are a part of this Contract.
30. Provide fire-safing/firestopping at all locations that are required to maintain a fire rating at floor and wall penetrations required as a result of the Work of this Contract. All wall/floor penetrations regardless of fire rating requirements shall be sealed by this Contract.
31. Provide all insulation required for the scope of this Contract.
32. Furnish any access panels, which are required for, access to the Work by this Contract. Coordinate opening requirements with the General Contractor. Provide floor access boxes as specified.
33. Coordinate/layout openings required for all exterior louvers and vents in new construction with the General Contractor.
34. Provide final Mechanical connections of Owner furnished equipment, as shown, or specified.
35. Provide final Mechanical connection of kitchen equipment.
36. Coordinate tie-in of ventilation control system to fire alarm system with Electrical Contractor.
37. Motor starters for packages Mechanical equipment shall be furnished by the Mechanical Contractor; loose starters and disconnect switchers shall be furnished and installed by Electrical Contractor.
38. Provide heat tracing for own Work.
39. Install duct smoke detectors furnished by the Electrical Contractor.
40. Work must be complete, operational and tested to meet the requirements of state and local codes.

3. **Plumbing Construction Contract 3758-3:** The Plumbing Contract includes the furnishing and installation of all plumbing equipment, accessories and piping systems, plus other construction operations traditionally recognized as Plumbing Construction. Work under this prime contract includes, but is not limited to, the following:

- a. All Plumbing Construction work indicated on these Contract Documents.
- b. All work described in the following Specification Sections:

Division 0 – Bidding and Contract Requirements	All Sections
Division 1 – General Requirements	All Sections
Divisions 2 through 12 - General Construction	No Specific Sections*

*see note 'c' below

Division 13 – Special Construction	All Plumbing Construction Related Sections and Work
Divisions 14 – Conveying Equipment *see note ‘c’ below	No Specific Sections*
Division 21 – Fire Suppression	All Plumbing Construction Related Sections
Division 22 – Plumbing	All Sections
Division 23 - Heating, Ventilating and Air Cond. *see note ‘c’ below	No Specific Sections*
Divisions 26, 27 & 28 - Electrical Construction *see note ‘c’ below	No Specific Sections*
Divisions 31, 32 & 33 - General Construction *see note ‘c’ below	No Specific Sections*

- c. Where Specification Sections included in the Scope of this Prime Contract reference provisions of Specification Sections of another Prime Contract, those provisions shall be included in the Work of this Prime Contract as if the referenced Specification Sections are included in their entirety in the Specification Sections for this Prime Contract.

Work in the Plumbing Contract shall include all labor, material, equipment and services necessary for the complete construction of Phasing (PHA-Series), Plumbing (P-Series), drainage, and Fire Protection (FP-Series) drawings and described in the General Conditions and Specification Divisions 01, 21, 22, and all referenced specifications that apply. The Plumbing Contract includes, but is not limited to, the following:

1. Sanitary drainage from new plumbing fixtures connected to sanitary drainage at Cleanout 5' outside building or as noted otherwise.
2. Domestic water distribution from 12" above floor slab inside the building.
3. Fire-suppression system distribution from 12" above floor slab inside the building. Provide riser and components with distribution piping to all new sprinkler heads throughout new building. Fire-suppression system is engineered by PC, signed and sealed.
4. Natural gas distribution system from the gas meter or as noted otherwise, including utility connections. Provide excavation, bedding, and backfill for underground lines.
5. Storm water system to 5 ft outside the building for General Contractor to connect. Include connection to downspouts within building.
6. Radon gas piping and sealants at piping.
7. Roof drains installation including required steel reinforcing. Coordinate exact locations with General Contractor. Connect to storm water system.
8. Plumbing connections to equipment furnished by the General Construction Contract Mechanical Contract and Electrical Contract.
9. Concrete equipment bases (pads) required by Plumbing work.
10. Hoisting required for contract work.
11. Provide Operation and Maintenance instruction manuals and specified training to the Owner including video taping of sessions.

12. Provide layout for the General Contractor indicating all openings in the new floor and roof decks that have dimensions larger than 10". Openings with dimensions smaller than 10" shall be provided by the Plumbing Contractor, who shall also provide support steel at these openings as required for installation by the General Contractor. All other framing, lintels, miscellaneous supports, etc., required but not specifically shown on the Drawings shall be by this Contractor.
13. Provide protection of structure, finishes, and landscaping from damage resulting from the Work of the Contract. Repair any damage promptly to the satisfaction of the Owner.
14. Provide painting for "touch up" required to restore "factory finished" equipment and material to its original condition.
15. Provide any miscellaneous structural framing and decking as required to ensure a complete installation of items that are a part of this Contract.
16. Provide all plumbing Work including sanitary sewer and vent piping, kitchen grease waste system, domestic water piping and equipment, gas piping, pipe insulation, water heater, elevator sump pump, roof and floor drains, plumbing fixtures, trim accessories, supports, anchorage, etc. unless shown or specified by others.
17. Provide all sprinkler work including sprinkler piping, heads, flow and taper switches, trim, accessories, supports unless shown or specified by others, anchorage, etc., as shown and/or specified.
18. Provide color-coding and identification of valves and lines as indicated.
19. Provide cleaning, disinfecting and testing of lines and equipment, and final inspection.
20. Provide wall sleeves, flashing, pipe hangers, supports, blocking, etc., as required for installation of fixtures and equipment.
21. Provide all insulation required for the scope of this Contract.
22. Provide all cutting, patching, excavation, bedding, backfill, etc., as necessary to install the Work of this Contract.
23. Provide any housekeeping and equipment pads required for equipment (interior or exterior) that are required for the work of this Contract, but not shown on Architectural, Civil, or Structural Drawings. General Contractor is to provide all housekeeping and equipment pads shown on Architectural, Civil, and Structural Drawings.
24. Furnish any embeds required to be cast in concrete or masonry to the appropriate Prime Contractor that would not be considered part of the building structure or any wall assembly but required as a result of this contract.
25. Provide any miscellaneous structural framing and decking as required to ensure a complete installation of items that are a part of this Contract.
26. Provide concrete at all services crossing under or near foundations that require excavated area to be filled with concrete.
27. Coordinate with the General Contractor installation of piping installed inside masonry units, include providing any temporary supports that are necessary.
41. Provide firesafing/firestopping at all locations that are required to maintain a fire rating at floor and wall penetrations required as a result

of the Work of this Contract. All wall/floor penetrations regardless of fire rating requirements shall be sealed by this Contract.

28. Furnish any access panels, which are required for, access to the Work by this Contract. Coordinate opening requirements with the General Contractor. Provide floor access boxes as specified.
29. Provide final Plumbing connections of Owner furnished equipment, as shown or specified.
30. Provide final sprinkler connections to Owner furnished equipment, as shown or specified.
31. Provide final cleaning of all fixtures.
32. Review and coordinate with General Contractor's Educational Casework subcontractors to furnish all sinks, sink outlets, faucets, bubblers, overflows, plugs, strainers, fittings, etc., as shown or specified in Casework Specification. Plumbing Contractor will be responsible for installation and final connections of these items. Plumbing Contractor shall furnish and install all stops, and other fittings not listed above for casework equipment, as specified in plumbing sections and shall make all final connections. General Contractor will provide all accessories, as specified. Plumbing Contractor to make final connections of service fittings furnished by General Contractor.
33. Coordinate tie in of sprinkler system to fire alarm system with Electrical Contractor. Provide flow and tamper switches for connection to fire alarm system.
34. Furnish and install roof drains and coordinate the installation with the General Contractor.
35. Electrical starters for Plumbing Equipment shall be provided under the Plumbing Contract. Disconnect furnished and installed by Electrical Contractor.
36. Review Section 11400 for required plumbing Work and coordinate with all Contractors.
37. Work must be complete, operational and tested to meet the requirements of state and local codes.

4. **Electrical Construction Contract 3758-4:** The Electrical/Data Networking Contract includes the furnishing and installation of the electrical power distribution, lighting, and special systems, plus other construction operations traditionally recognized as Electrical Construction. Work under this prime contract includes, but is not limited to, the following:

- a. All Electrical Construction work indicated on these Contract Documents.
- b. All work described in the following specification sections.

Division 0 – Bidding and Contract Requirements	All Sections
Division 1 – General Requirements	All Sections
Divisions 2 through 14 - General Construction	No Specific Sections*
*see note 'c' below	
Divisions 21 and 22 – Plumbing Construction	No Specific Sections*

*see note 'c' below

Division 23 – Heating, Ventilating and Air Cond.	No Specific Sections*
--	-----------------------

*see note 'c' below

Division 26 – Electrical	All Sections
--------------------------	--------------

Division 27 – Communications	All Sections
------------------------------	--------------

Division 28 – Electronic Safety and Security	All Sections
--	--------------

Divisions 31, 32 & 33 – General Construction	No Specific Sections*
--	-----------------------

*see note 'c' below

- c. Where Specification Sections included in the Scope of this Prime Contract reference provisions of Specification Sections of another Prime Contract, those provisions shall be included in the Work of this Prime Contract as if the referenced Specification Sections are included in their entirety in the Specification Sections for this Prime Contract.

5. Definition of Extent of Prime Contract Work: The Contract Documents indicate the extent of each prime contract. Except where the Contract Documents contain a more specific description, general names and terminology on the Drawings and in the Specification Sections determine which prime contract includes a specific element of the Project.
6. Local custom and trade union jurisdictional settlements do not control the scope of Work included in each prime contract. When a potential jurisdictional dispute or similar interruption of work is first identified or threatened, the affected prime contracts shall promptly negotiate a reasonable settlement to avoid or minimize the pending interruption and delays.

Work in the Electrical Contract shall include all labor, material, equipment and services necessary for the complete construction of all electrical Work shown on the Phasing (PHA-Series), Electrical (E-Series) drawings, Site Electrical (SE-Series), and Site Electrical Demolition (SED-Series) drawings and described in the General Conditions and Specification Divisions 01 and 26 and all referenced specifications that apply. Work in the Electrical Contract includes, but is not limited to, the following:

1. Electrical power service and distribution including all new site electrical utility work and ductbanks. Concrete encasement by EC.
2. Exterior and interior building and site lighting including light pole bases and all underground conduit installation and backfilling. Final restoration of grass seeding, mulching, or paving by GC.
3. Theatrical Lighting.
4. Communications, data, security, and fire detection systems.
5. Special electrical systems, including the following:
 - a. Uninterruptible power supply systems.
 - b. Packaged engine generator systems.
 - c. Battery power systems.
 - d. Unit power conditioners.
 - e. Power generation systems.
6. Electrical connections to equipment furnished by the General Construction Contract Plumbing Contract and Mechanical Contract.
7. Concrete equipment bases (pads) required by Electrical Work.
8. Generator Pad, Generator, and all associated work.

9. Hoisting required for contract work.
10. Provide de-watering of excavations for Work of this Contract.
11. Provide Operation and Maintenance instruction manuals and specified training to the Owner including video taping of sessions.
12. Provide layout for the General Contractor indicating all openings in the new floor and roof decks that have dimensions larger than 10".
Openings with dimensions smaller than 10"

shall be provided by the Electrical Contractor, who shall also provide support steel at these openings as required for installation by the General Contractor. All other framing, lintels, miscellaneous supports, etc., required but not specifically shown on the Drawings shall be by this Contractor.
13. Provide start up and training as required by the contract documents.
14. Provide painting for "touch up" required to restore "factory finished" equipment and material to its original condition.
15. Provide all Electrical Work including testing, conduit, wiring and cable, boxes, wiring devices, enclosures, equipment final connections, support devices, identification, switchboards, disconnect switches, primary and secondary grounding, panel boards, motor controls, lighting fixtures, equipment systems, emergency power and lighting, fire alarm, and smoke detection, final Mechanical electrical, fire protection electrical, and plumbing electrical connections, hangers, supports unless specifically designated by the General Contractor, blocking, wall sleeves, flashing, etc., as shown and/or specified.
16. Provide equipment and wiring necessary for installation and interfacing of the following systems:
 - a. Fire Alarm System
 - b. Intercommunications, Time Signal, and Sound Systems
 - c. Mechanical Equipment
 - d. Plumbing Equipment
 - e. Fire Protection Equipment
 - f. Lighting Controls, etc.
 - g. Kitchen Equipment
 - h. Generator
 - i. Security System – Access Control
 - j. Scoreboards
 - k. Art Kilns
 - l. TV Distribution System
 - m. Computer Network Cabling
 - n. Emergency antenna system
 - o. Cell phone enhancing antenna system throughout the building
 - p. And as designated on drawings and in specifications
17. Electrical Contractor to provide a complete or partial system for all systems above including conduit, wire, connectors, terminations, patch controls, jacks, testing, equipment, brackets, hardware, layout check out, training, etc.
18. Provide identification of equipment as specified.
19. Provide all cutting, patching, excavation, and backfill, including work for

- new incoming services, exterior lighting, etc., as necessary to install the Work of this Contract.
20. Provide fire rated backboards for electrical and telephone equipment as shown or specified.
 21. Furnish any access panels, which are required for, access to the Work by this Contract. Coordinate opening requirements with the General Contractor. Provide floor access boxes as specified.
 22. Provide food service interconnect wiring as per the Contract Documents.
 23. Provide any housekeeping and equipment pads required for equipment (interior or exterior) that are required for the work of this Contract, but not shown on Architectural, Civil, or Structural Drawings.
 24. Furnish any embeds required to be cast in concrete or masonry to the appropriate Prime Contractor, except embeds related to exterior light bases, which are installed by the Electrical Contractor.
 25. Provide any miscellaneous structural framing and decking as required to ensure a complete installation of items that are a part of this Contract.
 26. Provide concrete encasement of conduit, foundation/base for site lighting, etc., as required for Work by this Contract. Provide warning tape as required. Provide rebar reinforcement as shown on Contract Documents.
 27. Provide firesafing/firestopping at all locations that are required to maintain a fire rating at floor and wall penetrations required as a result of the Work of this Contract. All penetrations regardless of fire rating shall be sealed by this Contract.
 28. Provide power wiring 120 volts and greater to all Mechanical, Electrical, and Plumbing equipment, shop equipment, etc., as required or shown.
 29. Provide final electrical power connection of educational casework, and equipment as per the Contract Documents and Specifications. Install all electrical wiring and devices within the plastic laminate, wood, and library casework furnished by the respective contractor.
 30. The Electrical Contractor shall furnish and install the conduit and wire for all systems using 120 volts and above.
 31. Provide testing and documentation of test results for electrical systems as per the Contract Documents.
 32. Provide duct bank complete with excavation and backfill, concrete, conduit, warning tape and manholes.
 33. Electrical Contractor shall provide conduit and back boxes, surface metal raceway, pull strings, sleeves to communication closets, and device boxes as required for installation of all communication systems as per the Contract Documents.
 34. Electrical Contractor to provide and install telephone and data cables for connection to the fire alarm panel, security panel, ATC panels, etc.
 35. Electrical Contractor shall provide fire alarm wiring to fire sprinkler flow and tamper switches as required.
 36. Electrical Contractor shall provide heat rise and smoke detector system.
 37. Electrical Contractor shall provide wire and power for magnetic hold open devices installed by the General Contractor for hold open doors.
 38. The Electrical Contractor shall be responsible for providing temporary

- power to heating equipment to prevent freezing of the building.
39. Coordinate with Mechanical Contractor for electrical hook-up of Mechanical equipment in order to complete all construction-phasing requirements.
 40. Provide a complete data system including all wiring, fiber optic cable, MDF and IDF head end equipment, jacks, testing, etc.
 41. Provide complete cable TV system including wiring and jacks. TV brackets/video projector mount will be provided by owner for installation by the General Contractor.
 42. Provide all inner duct and fireproofing as required for Work of this Contract.
 43. Work must be complete, operational and tested to meet the requirements of state and local codes.
 44. EC to provide all third party electrical inspections by a qualified company certified to inspect in the state of Pennsylvania.

1.6 PHASED CONSTRUCTION

- A. The Work of this Project shall be conducted in phases as shown on PH1.1, with each phase substantially complete as indicated.
 1. Refer to Division 1 Section "Construction Progress Documentation" for the Project Phasing Narrative and to the Contract Drawings for the Project Phasing Plan.

1.7 WORK BY OWNER

- A. General: Cooperate fully with the Owner so Work may be carried out smoothly, without interfering with or delaying Work under this Contract or work by the Owner. Coordinate the Work of this Contract with work performed by the Owner.
- B. Preceding/Concurrent Work: The Owner will perform the following construction operations at the Project site. These operations will be conducted simultaneously with Work under this Contract.
 - Relocate existing fire alarm panel in the main office area to the new MDF room summer of 2025. Relocated the existing PA system in the main office to the hallway just outside the main office summer of 2025.

1.9 PRIME CONTRACTORS USE OF PREMISES

- A. General: During the construction period the prime contractors jointly shall have full use of the premises for construction operations, including use of the site except as stated below in occupied areas of building. Each Prime Contractor's use of the premises is limited only by the Owner's right to perform work or to retain other contractors on portions of the Project.

- B. Use of the Site: Limit use of the premises to work in areas indicated. Confine operations to areas within contract limits indicated. Do not disturb portions of the Site beyond the areas in which the Work is indicated.
 - 1. Owner Occupancy: Allow for Owner occupancy and use by the public.
 - 2. Driveways and Entrances: Keep driveways and entrances serving the premises clear and available to the Owner, the Owner's employees, users, deliveries and emergency vehicles at all times. Do not use these areas for parking or storage of materials. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site. There can be NO deliveries to the site Monday through Friday while school is in session between 8 am and 8:45am and between 3:15pm and 4pm. There are hundreds of students, staff, cars, and buses and any trucks showing up between these times will be turned away.

1.10 OCCUPANCY REQUIREMENTS

- A. Partial Owner Occupancy: The Owner may occupy and place installed equipment in completed areas of the building prior to Substantial Completion. Such placing of equipment and partial occupancy shall not constitute acceptance of the total Work. The school will be occupied throughout construction starting in September 2025 through the last day of school in June 2025. Refer to the School District's website for school start, finish, various breaks, and days school is closed. Contractors must coordinate all work within occupied areas in advance and work on the off hours listed below.
 - 1. The Architect will prepare a Certificate of Substantial Completion for each specific portion of the Work to be occupied prior to Owner occupancy.
 - 2. Obtain a Certificate of Occupancy from local building officials prior to Owner occupancy.
 - 3. Prior to partial Owner occupancy, mechanical and electrical systems shall be fully operational. Required inspections and tests shall have been successfully completed. Upon occupancy, the Owner will operate and maintain mechanical and electrical systems serving occupied portions of the building.
 - 4. Upon occupancy, the Owner will assume responsibility for maintenance and custodial service for occupied portions of the building.

1.11 WORK RESTRICTIONS

- A. Work Restrictions, General: Comply with the following restrictions on construction operations.
 - 1. Comply with limitations on the use of public streets and with other requirements of authorities having jurisdiction.
- B. On-Site Work Hours: Limit on-site Work to normal business working hours of 7 a.m. to 4 p.m., Monday through Friday, unless otherwise indicated. All Contractors must follow the Township noise ordinance for work that restricts noise creating activities to starting not before 8am Monday through Saturday. Refer to the Township's website for the exact noise activity hours. Off hours for the project Monday through Friday while school is in session from 5am- 7:30 am

and from 4pm to 12pm. Any second shift work should be indicated on the approved construction schedule. All Work performed during non-normal business hours must be coordinated with and approved by the Owner a minimum of 48 hours prior to the Work being performed. All Primes should plan on installing all the new plumbing, sprinklers, conduit, low voltage wiring, MC cabling, chilled & hot water, etc. during off hours in the hallways throughout the building during the school year. This work cannot just be done during the summer months or when school is off.

- C. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by the Owner or others unless permitted under the following conditions and then only after providing temporary utility services according to requirements indicated:
 - 1. Notify the Owner not less than 72 hours in advance of proposed utility interruptions.
 - 2. Obtain the Owner's written permission before proceeding with utility interruptions.
- D. Noise, Vibration, and Odors: Coordinate operations that may result in high levels of noise and vibration, odors or other disruptions to the Owner.
 - 1. Notify the Owner not less than 48 hours in advance of proposed disruptive operations.
 - 2. Obtain the Owner's written permission before proceeding with disruptive operations.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

END OF SECTION 011000

SECTION 012100 - ALLOWANCES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements governing allowances.

Selected materials are specified in the Contract Documents by allowances. In some cases, these allowances include installation. Allowances have been established in lieu of additional requirements and to defer selection of actual materials to a later date when additional information is available for evaluation. If necessary, additional requirements will be issued by Change Order.

- B. Types of allowances include the following:

1. Lump-sum allowances. **(N/A THIS PROJECT)**
2. Unit-cost allowances. **(N/A THIS PROJECT)**
3. Quantity allowances.
4. Contingency allowances. **(N/A THIS PROJECT)**

- C. Related Requirements:

1. Section 012200 "Unit Prices" for procedures for using unit prices, including adjustment of quantity allowances when applicable.

1.2 QUANTITY ALLOWANCE

- A. Quantities indicated as Quantity Allowances on the Bid Form are in excess of quantities required to complete the Work as indicated on the Drawings and Specifications (Quantities to be included in BASE BID are indicated under each Unit Price described in SECTION 012200 UNIT PRICES) and the fee for such Quantity Allowances shall be included in the Base Bid.
- B. If Contractor determines that it must use a Quantity Allowance, then it must notify the Owner in advance and allow the Owner to independently confirm the necessity and quantity of allowance used.
- C. Any unused Quantity Allowance shall be credited to the Owner through a deduct change order upon completion of the Work.
- D. NOT USED

1.3 NOT USED

1.4 NOT USED

END OF SECTION 012100

SECTION 012200 - UNIT PRICES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for Unit Prices.
- B. Related Sections: The following Sections contain requirements that relate to this Section:
 - 0. Division 1 Section "Modification Procedures" for procedures for submitting and handling Change Orders.
 - 1. Division 1 Section "Quality Requirements" for general testing and inspecting requirements.

1.3 DEFINITIONS

- A. A Unit Price is an amount incorporated in the Agreement, applicable during the duration of the Work as a price per unit of measurement for materials, equipment, or services, or a portion of the Work, added to or deducted from the Contract Sum by appropriate modification, if the scope of work or estimated quantities of work required by the Contract Documents are increased or decreased.

1.4 PROCEDURES

- A. Unit prices include all necessary material, plus cost for delivery, installation, insurance, applicable taxes, overhead, and profit.
- B. Measurement and Payment: Refer to individual specification sections for work that requires establishment of unit prices. Methods of measurement and payment for unit prices are specified in those Sections.
- C. Owner reserves the right to reject Contractor's measurement of work-in-place that involves use of established unit prices and to have this work measured, at Owner's expense, by an independent surveyor acceptable to Contractor.
- D. List of Unit Prices: A schedule of unit prices is included in Part 3 of this section. Specification sections referenced in the schedule contain requirements for materials described under each unit price.

- E. The intended purpose of Unit Prices is to pre-establish a unit cost for small or incidental scopes of work. If quantities originally contemplated are materially changed so that application of such unit prices will cause a substantial inequity to Owner or Contractor, Owner reserves the right to equitably adjust the Unit Price or to require that the work be performed on a time and material basis.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 SCHEDULE OF UNIT PRICES

D. GENERAL CONSTRUCTION - UNIT PRICES

GC-1: Bulk Soil Excavation.

1. Description: Bulk excavation of unsatisfactory soil and disposal off site (as required in accordance with Division 2 Section "Earthwork."
2. Unit of Measurement: Cubic yard of soil excavated, based upon survey of volume removed.
3. Quantity Allowance- 100 cubic yards

GC-2: Borrow Soil Replacement.

0. Description: Borrow soil replacement, placement and compaction with engineered fill from off site (equivalent structural fill to PennDOT 2a modified), as required, in accordance with Division 2 Section "Earthwork." Poor soil to be removed from the site as part of this unit price
1. Unit of Measurement: Cubic yard of soil excavated and replaced with compacted fill, based upon survey of volume removed.
2. Quantity Allowance- 100 cubic yards

GC-3: Trench Rock Removal and Replacement with Satisfactory Material.

1. Description: Classified trench rock removal and disposal off site and replacement, placement and compaction with satisfactory fill material or engineered fill from off site, as required, in accordance with Division 2 Section "Earthwork."
2. Unit of Measurement: Cubic yard of rock excavated, based upon survey of volume removed.
3. Quantity Allowance- 40 cubic yards

GC-4: Bulk Rock Removal and Replacement with Satisfactory Material.

1. Description: Classified bulk rock removal and disposal off site and replacement, placement and compaction with satisfactory fill material or engineered fill from off site, as required, in accordance with Division 2 Section "Earthwork."

2. Unit of Measurement: Cubic yard of rock excavated, based upon survey of volume removed.
3. Quantity Allowance- 40 cubic yards

GC-5: Cutting and Patching of Concrete Floor Slabs.

1. Description: Cutting of new or existing concrete floor slabs up to 6 inches thick, removal and excavation as required, and subsequent backfill, compaction, and patching of concrete in accordance with Division 1 Section "Cutting and Patching" not otherwise indicated in the Contract Documents.
2. Unit of Measurement: Square foot of concrete removed.
3. Quantity Allowance- 500 square feet

GC-6: Floor Leveler.

1. Description: Provide an average 1/4-inch thickness of cementitious underlayment.
2. Unit of Measurement: Square foot.
3. Quantity Allowance- 10,000 square feet

G-7: General Laborer.

1. Description: Provide a general laborer for the Owner's use for work as directed by the Owner Representative and at his discretion
2. Unit of Measure: Per Man-hour
3. Allowance Quantity: Include 100 man-hours.

G-8: Carpenter Journeyman Labor.

1. Description: Provide a general laborer for the Owner's use for work as directed by the Owner Representative and at his discretion:
2. Unit of Measure: Per Man-hour
3. Allowance Quantity: Include 100 man-hours.

G-9: Journeyman Painter Class 2 Labor.

1. Description: Provide a journeyman painter for Owner's use for work as directed by the Owner Representative and at his discretion:
2. Unit of Measure: Per Man-hour
3. Allowance Quantity: Include 100 man-hours.

G-10: Access Panels.

1. Description: Provide 2' x 2' access panels to be installed at the direction of the Owner Representative.
2. Unit of Measurement: Per panel.
3. Allowance Quantity: 15 panels

G-11: Curb Replacement.

1. Description: Provide price for labor and materials for curb replacement, price includes removal/disposal, replacement with new and asphalt patching.
2. Unit of Measurement: Per linear feet.
3. Allowance Quantity: 150 linear feet.

G-12: Sidewalk Replacement.

1. Description: Provide price for labor and materials for sidewalk replacement, price includes removal/disposal and replacement with new concrete per typical details on the plans.
2. Unit of Measurement: per square foot.
3. Allowance Quantity: 500 square feet.

G-13: Replace Existing Door Frame.

1. Description: Provide 5 man hours and new door frame to replace and replumb standard 3'-4" wide door frame at standard classroom from hallway.
2. Unit of Measurement: Per door.
3. Allowance Quantity: 15 doors.

E. HVAC CONSTRUCTION - UNIT PRICES

HC-1: 3/4" Copper Heating Water Piping.

1. Description: Provide additional 3/4" copper piping, consisting of fittings, insulation, and hangers. Perform in accordance with applicable Division 23 Sections and drawing requirements for similar work.
2. Unit of Measurement: Per linear foot.
3. Quantity Allowance: Include 40 linear feet.

HC-2: 1" Copper Heating Water Piping.

1. Description: Provide additional 1" copper piping, consisting of fittings, insulation, and hangers. Perform in accordance with applicable Division 23 Sections and drawing requirements for similar work.
2. Unit of Measurement: Per linear foot.
3. Quantity Allowance: Include 40 linear feet.

HC-3: 2" Copper Heating Water Piping.

1. Description: Provide additional 1" copper piping, consisting of fittings, insulation, and hangers. Perform in accordance with applicable Division 23 Sections and drawing requirements for similar work.
2. Unit of Measurement: Per linear foot.
3. Quantity Allowance: Include 40 linear feet.

HC-4: 3/4" Copper Chilled Water Piping.

1. Description: Provide additional 3/4" copper piping, consisting of fittings, insulation, and hangers. Perform in accordance with applicable Division 23 Sections and drawing requirements for similar work.
2. Unit of Measurement: Per linear foot.
3. Quantity Allowance: Include 40 linear feet.

HC-5: 1" Copper Chilled Water Piping.

1. Description: Provide additional 1" copper piping, consisting of fittings, insulation, and hangers. Perform in accordance with applicable Division 23 Sections and drawing requirements for similar work.
2. Unit of Measurement: Per linear foot.
3. Quantity Allowance: Include 40 linear feet.

HC-6: 2" Copper Chilled Water Piping.

1. Description: Provide additional 1" copper piping, consisting of fittings, insulation, and hangers. Perform in accordance with applicable Division 23 Sections and drawing requirements for similar work.
2. Unit of Measurement: Per linear foot.
3. Quantity Allowance: Include 40 linear feet.

HC-7: 4" Black Steel Piping.

1. Description: Provide additional 4" black steel piping, consisting of fittings, insulation, and hangers. Perform in accordance with applicable Division 23 Sections and drawing requirements for similar work.
2. Unit of Measurement: Per linear foot.
3. Quantity Allowance: Include 40 linear feet.

HC-8: 6" Black Steel Piping.

1. Description: Provide additional 6" black steel piping, consisting of fittings, insulation, and hangers. Perform in accordance with applicable Division 23 Sections and drawing requirements for similar work.
2. Unit of Measurement: Per linear foot.
3. Quantity Allowance: Include 40 linear feet.

HC-9: 1" Ball Valve.

1. Description: Provide additional 1" ball valve and insulation. Perform in accordance with applicable Division 23 Sections and drawing requirements for similar work.
2. Unit of Measurement: Per assembly.
3. Quantity Allowance: 10 assemblies.

HC-10: 2" Ball Valve.

1. Description: Provide additional 2" ball valve and insulation. Perform in accordance with applicable Division 23 Sections and drawing requirements for similar work.
2. Unit of Measurement: Per assembly.
3. Quantity Allowance: 10 assemblies.

HC-11: 4" Butterfly Valve.

1. Description: Provide additional 4" butterfly valve and insulation. Perform in accordance with applicable Division 23 Sections and drawing requirements for similar work.
2. Unit of Measurement: Per assembly.
3. Quantity Allowance: 4 assemblies.

HC-12: DDC Valve Actuator.

1. Description: The contract Unit Price to provide, install and wire a DDC valve actuator according to Division 23 Sections.
2. Unit of Measurement: Per unit.
3. Quantity Allowance: 4 assemblies.

HC-13: DDC Damper Actuator.

1. Description: The contract Unit Price to provide, install and wire a DDC valve actuator according to Division 23 Sections.
2. Unit of Measurement: Per unit.
3. Quantity Allowance: 4 assemblies.

HC-14: DDC Sensors.

1. Description: The contract Unit Price to provide, install and wire a carbon dioxide and/or humidity sensor including programming according to Division 23 Sections.
2. Unit of Measurement: Per unit.
3. Quantity Allowance: 4 assemblies.

HC-15: Ductwork.

1. Description: Provide galvanized steel ductwork including duct insulation and hangers. Perform in accordance with applicable Division 23 Sections and drawing requirements for similar work.
2. Unit of Measurement: Per Pound of sheet metal.
3. Quantity Allowance: 400 pounds.

H-16: Pipe Fitter Journeyman.

1. Description: Provide a general laborer for the Owner's use for work as directed by the Owner Representative and at his discretion:
2. Unit of Measure: Per Man-hour
3. Allowance Quantity: Include 50 man-hours.

H-17: Sheet Metal Journeyman.

1. Description: Provide a journeyman painter for Owner's use for work as directed by the Owner Representative and at his discretion:
2. Unit of Measure: Per Man-hour.
3. Allowance Quantity: Include 50 man-hours.

F. PLUMBING CONSTRUCTION - UNIT PRICES

PC-1: Bulk Soil Excavation.

0. Description: Bulk excavation of unsatisfactory soil and disposal off site as required in accordance with Division 2 Section "Earthwork."
1. Unit of Measurement: **Cubic yard** of soil excavated, based upon survey of volume removed.

PC-2: Borrow Soil Replacement.

1. Description: Borrow soil replacement, placement and compaction with satisfactory fill material or engineered fill from off site, as required, in accordance with Division 2 Section "Earthwork."
2. Unit of Measurement: **Cubic yard** of soil excavated, based upon survey of volume removed.

PC-3: Trench Rock Removal and Replacement with Satisfactory Material.

1. Description: Classified trench rock removal and disposal off site and replacement with satisfactory fill material or engineered fill from off site, as required, in accordance with Division 2 Section "Earthwork."
2. Unit of Measurement: **Cubic yard** of rock excavated, based upon survey of volume removed.

PC-4: Bulk Rock Removal and Replacement with Satisfactory Material.

1. Description: Classified bulk rock removal and disposal off site and replacement with satisfactory fill material or engineered fill from off site, as required, in accordance with Division 2 Section "Earthwork."
2. Unit of Measurement: **Cubic yard** of rock excavated, based upon survey of volume removed.

PC-5: 1/2" Domestic Water Pipe

0. Description: Provide additional 1/2" Domestic Water Pipe installed including insulation and hangers. Perform in accordance with applicable Division 22 Sections and drawing requirements for similar work.
1. Unit of Measurement: (1') of 1/2" domestic water pipe installed with insulation.
2. Quantity Allowance: Twenty-five feet (25')

PC-6: 2" Domestic Water Pipe

0. Description: Provide additional 2" Domestic Water Pipe installed including insulation and hangers. Perform in accordance with applicable Division 22 Sections and drawing requirements of similar work.
1. Unit of Measurement: (1') of 2" Domestic Water Pipe.
2. Quantity Allowance: Fifty feet (50')

PC-7: 1/2" Ball Valves

0. Description: Provide five (5) additional 1/2" ball valves installed. Perform in accordance with applicable Division 22 Sections and drawing requirements for similar work.
1. Unit of Measurement: One 1/2" Ball Valve installed.
2. Quantity Allowance: ten (10) Valves.

PC-8: 2" Ball Valves

0. Description: Provide five (5) additional 2" ball valves installed. Perform in accordance with applicable Division 22 Sections and drawing requirements for similar work.

1. Unit of Measurement: One 2" Ball Valve installed.
2. Quantity Allowance: Five (5) Valves.

PC-9: 2" Sanitary Pipe

0. Description: Provide additional 2" sanitary pipe installed including excavation and backfill. Perform in accordance with applicable Division 22 Sections and drawing requirements for similar work.
1. Unit of Measurement: (1') of 2" sanitary pipe installed.
2. Quantity Allowance: Fifty feet (50')

PC-10: 4" Sanitary Pipe

0. Description: Provide additional 4" sanitary pipe installed including excavation and backfill. Perform in accordance with applicable Division 22 Sections and drawing requirements for similar work.
1. Unit of Measurement: (1') of 4" sanitary pipe installed.
2. Quantity Allowance: One Hundred feet (100')

PC-11: Natural Gas Pipe

0. Description: Provide additional 1" natural gas pipe installed including hanger. Perform in accordance with applicable Division 22 Sections and drawing requirements for similar work.
1. Unit of Measurement: (1') of 1" natural gas pipe installed.
2. Quantity Allowance: Fifty feet (50')

PC-12: Plumbing Journeyman

0. Description: Provide a journeyman painter for Owner's use for work as directed by the Owner Representative and at his discretion:
- i. Unit of Measure: Per Man-hour.
2. Quantity Allowance: Ten hours (10)

D. ELECTRICAL CONSTRUCTION - UNIT PRICES

EC-1: Duplex Receptacle and Wiring.

0. Description: Provide an additional duplex receptacle assembly. Include 20A, 120V duplex receptacle, backbox, cover plate, 3/4" conduit/raceway with 2 #12 conductors and 1 #12 ground wire to a point of authorized connection (maximum distance 75 feet), necessary wall penetration cutting and patching, terminations and labeling. Perform in accordance with applicable Division 26 Sections and drawing requirements for similar work.
1. Unit of Measurement: Per assembly
2. Maximum Distance: 75'
3. Quantity Allowance: Include 30 assemblies

EC-2: Exit Sign & Wiring

0. Description: Provide an additional exit sign assembly (luminaire type EX1A or EX2) including appropriate mounting equipment, 3/4" conduit/raceway with 2#10 conductors and 1 #12 ground wire, necessary wall penetration cutting and patching, terminations and connections. Connect to closest normal/emergency "Exit Sign" circuit. Perform in accordance with applicable Division 26 Sections and drawing requirements for similar work.
1. Unit of Measurement: Per assembly
2. Maximum Distance: 30'
3. Quantity Allowance: Include 4 assemblies

EC-3: Light Fixture & Wiring

1. Description: Provide an additional light assembly, consisting of luminaire type RC3, RC4, RC4A or RC5 (Architect's choice), appropriate mounting equipment, 3/4" conduit with 2#12 conductors and 1#12 ground wire to a point of authorized connection, necessary wall penetration cutting and patching, terminations and connections. Perform in accordance with applicable Division 26 Sections and drawing requirements for similar work.
2. Unit of Measurement: Per assembly
3. Maximum Distance: 30'
4. Quantity Allowance: Include 6 assemblies

EC-4: Light Fixture & Wiring

0. Description: Provide an additional light assembly, consisting of luminaire type RD2 or RD3 (Architect's choice), appropriate mounting equipment, 3/4" conduit with 2 #12 conductors and 1 #12 ground wire to a point of authorized connection, necessary wall penetration cutting and patching, terminations and connections. Perform in accordance with applicable Division 26 Sections and drawing requirements for similar work.
1. Unit of Measurement: Per assembly
2. Maximum Distance: 30'
3. Quantity Allowance: Include 4 assemblies

EC-5: Heat or Smoke Detector & Wiring

0. Description: Provide an additional heat or smoke detector assembly, consisting of detector of type required for application, appropriate backbox (as applicable) and mounting equipment, cabling, conduit, necessary wall penetration cutting and patching, terminations, connections to fire alarm system, and programming required. Perform in accordance with applicable Division 28 Sections and drawing requirements for similar work.
1. Unit of Measurement: Per assembly
2. Maximum Distance: 100'
3. Quantity Allowance: Include 5 assemblies

EC-6: Duct Detector & Wiring

0. Description: Provide an additional duct detector assembly, consisting of detector of type required for application, appropriate backbox (as applicable) and mounting equipment,

remote indicating, cabling, conduit, necessary wall penetration cutting and patching, terminations, connections to fire alarm system, and programming required. Perform in accordance with applicable Division 28 Sections and drawing requirements for similar work.

1. Unit of Measurement: Per assembly
2. Maximum Distance: 100'
3. Quantity Allowance: Include 2 assemblies

EC-7: Fire Alarm Pull Station & Wiring

0. Description: Provide an additional pull station assembly, consisting of pull station device, backbox, cabling, conduit, necessary wall penetration cutting and patching, terminations, connections to fire alarm system, and programming required. Perform in accordance with applicable Division 28 Sections and drawing requirements for similar work.
1. Unit of Measurement: Per assembly
2. Maximum Distance: 100'
3. Quantity Allowance: Include 2 assemblies

EC-8: Fire Alarm Audible/Visual Device & Wiring

0. Description: Provide an additional fire alarm A/V device assembly, consisting of A/V device, backbox, cabling, conduit, necessary wall penetration cutting and patching, terminations, connections to fire alarm system, programming, and additional power supplies required. Perform in accordance with applicable Division 28 Sections and drawing requirements for similar work.
1. Unit of Measurement: Per assembly
2. Maximum Distance: 100'
3. Quantity Allowance: Include 5 assemblies

EC-9: Intercom Speaker and Wiring

0. Description: Provide an additional intercom speaker (type as required for space) consisting of backbox, mounting equipment, cabling, conduit and all terminations and connections to program system. Perform in accordance with applicable Division 27 Sections and drawing requirements for similar work.
1. Unit of Measurement: Per assembly
2. Maximum Distance: 100'
3. Quantity Allowance: Include 4 assemblies

EC-10: Secondary Clock and Wiring

0. Description: Provide an additional secondary clock (type as required for space) consisting of backbox, mounting equipment, cabling, conduit and all terminations and connections to master clock system. Perform in accordance with applicable Division 27 Sections and drawing requirements for similar work.
1. Unit of Measurement: Per assembly
2. Maximum Distance: 100'
3. Quantity Allowance: Include 4 assemblies

EC-11: Data Outlets and Wiring

0. Description: Provide an additional C2 or W2 data outlet as detailed on the Drawings consisting of backbox, jacks, plate, cabling, patch panel port, conduit, all terminations, and labeling; warranty shall be included on this outlet. Perform in accordance with applicable Division 27 Sections and drawing requirements for similar work.
1. Unit of Measurement: Per assembly
2. Maximum Distance: 300'
3. Quantity Allowance: Include 10 assemblies

EC-12: Video Surveillance Outlet and Wiring

0. Description: Provide an additional outlet (type as required for space) as detailed on the Drawings consisting of backbox, jacks, plate, cabling, conduit, all terminations, and labeling; warranty shall be included on this outlet. Perform in accordance with applicable Division 26 & 27 Sections and drawing requirements for similar work.
1. Unit of Measurement: Per assembly
2. Maximum Distance: 300'
3. Quantity Allowance: Include 5 assemblies

E-13: ELECTRICAL JOURNEYMAN:

0. Description: Provide a journeyman painter for Owner's use for work as directed by the Owner Representative and at his discretion:
1. Unit of Measure: Per Man-hour
2. Allowance Quantity: Include 100 man-hours

END OF SECTION 012200

SECTION 012300 - ALTERNATES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements governing Alternates.

1.3 DEFINITIONS

- A. Definition: An alternate is an amount proposed by a Bidder and stated on the Bid Form for certain work defined in the Bidding Requirements that may be added to or deducted from the Base Bid amount if Owner decides to accept a corresponding change in either the amount of construction to be completed, or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.
 - 1. The cost or credit for each alternate is the NET addition to or deduction from the Contract Sum to incorporate the Alternate into the Work. No other adjustments are made to the Contract Sum.

1.4 PROCEDURES

- A. Coordination: Modify or adjust affected adjacent Work as necessary to completely and fully integrate that Work into the Project.
 - 1. Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not mentioned as part of the Alternate.
- B. Notification: Immediately following award of the Contract, notify each party involved, in writing, of the status of each Alternate. Indicate whether alternates have been accepted, rejected, or deferred for later consideration. Include a complete description of negotiated modifications to alternates.
- C. Execute accepted alternates under the same conditions as other Work of the Contract.
- D. Schedule: A "Schedule of Alternates" is included at the end of this Section. Specification sections referenced in the Schedule contain requirements for materials necessary to achieve the Work described under each alternate.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION

3.1 SCHEDULE OF ALTERNATES

A. GENERAL CONSTRUCTION - ALTERNATES

GC-1 Haverford District Office Renovation: State the amount to be ADDED to the Contract to provide all General Construction labor, plant and materials to renovate approximately 2,000 square feet and associated selective demolition to the existing School District of Haverford Township District Office's Main Reception, located at 50 Eagle Road, Havertown, PA as shown in the contract documents. The Base Bid shall be no work related to this building.

GC-2 Parking Overlay: State the amount to be **ADDED** to the Contract to provide all General Construction labor, plant and materials to overlay the existing parking lots as shown on the contract documents.

B. HVAC CONSTRUCTION – ALTERNATES

No Alternates for HVAC

C. PLUMBING CONSTRUCTION – ALTERNATES

No Alternates for Plumbing

ELECTRICAL CONSTRUCTION – ALTERNATES

EC-1 Haverford District Office Renovation: State the amount to be ADDED to the Contract to provide all Electrical Construction labor, plant and materials to renovate approximately 2,000 square feet and associated selective demolition to the existing School District of Haverford Township District Office's Main Reception, located at 50 Eagle Road, Havertown, PA as shown in the contract documents. The Base Bid shall be no work related to this building.

EC-2 NOT USED

EC-3 129.6 KW Roof Mounted Photovoltaic Array: State the amount to be ADDED to the Contract to provide all Electrical Construction labor, plant and equipment necessary to complete design and installation of a roof mounted photovoltaic system as shown on Drawings E8.4 and Specification Section 263100, including equipment and connection to the Coopertown Elementary School's replacement main electrical switchboard

(Refer to EC-5) as required for a nominal 129.2 KW (272 modules rated 600W) roof mounted photovoltaic array and nominal 132 KW inverter system consisting of exterior modular inverters with maximum power point tracking (MPPT) inverter input circuits, photovoltaic modules, each mounted on a roof mount assembly (including ballast), quick-connect electrical connectors, DC wiring, rapid shutdown disconnects, DC and AC disconnects in compliance with NEC 2017.

EC-4 Switchboard, Generator, Transfer Switch and Various Panels: State the amount to be ADDED to the Contract for Electrical Construction for the Contractor to provide and install the following electrical equipment: Switchboard MDS, Distribution Panels EDP, LBD and ODP, Generator G1, Automatic Transfer Switches ATS-O1 and ATS-LS, Manual Transfer Switch MTS-LS (MTS) as scheduled in Specification Section 260620 and Drawings E8.1 and E.8.2.

END OF SECTION 012300

SECTION 012500 - SUBSTITUTIONS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for handling requests for substitutions made after award of the Contract.
 - 1. Multiple Prime Contracts: Provisions of this Section apply to the construction activities of each prime contractor.
- B. Related Sections: The following Sections contain requirements that relate to this Section:
 - 1. Division 1 Section "Submittals" specifies requirements for submitting the Contractor's Construction Schedule and the Submittal Schedule.

1.3 DEFINITIONS

- A. The Definitions in this Article do not change or modify the meaning of other terms used throughout the Contract Documents.
- B. Substitution: Products considered to be able to perform the same function but that do not necessarily have the same design, arrangement, details, utility requirements and/or dimensions, etc.

Equal: Products of equivalent design, arrangement, details, utility requirements and/or dimensions, etc. produced by a manufacturer not specifically listed in the "Manufacturers" Article of a Specification Section.

- 1. Unless otherwise noted, equal products may be included in the Bid without additional approval by Architect.
- C. The following are not considered to be Substitutions:
 - 1. Revisions to the Contract Documents requested by Owner or Architect
 - 2. Contractor's determination of and compliance with governing regulations and orders issued by governing authorities having jurisdiction

1.4 SUBSTITUTIONS

- A. Substitution Request: Architect will consider requests for substitutions if received within 60 days AFTER Notice to Proceed. Requests received more than 60 days after Notice to Proceed may be considered or rejected at the sole discretion of Architect. Architect will only consider requests for substitution submitted by the prime contractor whose work is involved. No substitution requests will be considered from manufacturer's representatives or product vendors unless submitted through a prime contractor. **No substitution requests will be considered during the bid period. Bids shall be based on products from one of the manufacturers specified or an "equal" product.**
1. Transmit three (3) copies of each request for substitution for consideration. Requests shall be on the Substitution Request Form found at the end of this Section. Requests not meeting this procedural requirement will be returned with **no action taken**.
 2. Identify the Product to be substituted in each request. Include the related Specification Section and Drawing number. Only one substitution request will be considered per Substitution Request Form.
 3. Respond to, and attach all of the following items to the Substitution Request Form:
 - a. Coordination information, including a list of changes or modifications needed to other parts of the work and to construction performed by Owner and/or separate Contractors, that will be necessary to accommodate the proposed substitution.
 - b. A detailed comparison of significant qualities of the proposed substitution with those of the work specified. Significant qualities may include elements, such as performance, weight, size, durability and aesthetic effect
 - c. Product data, including drawings and descriptions of Products
 - d. Samples, where applicable or requested
 - e. A statement indicating the substitution's effect on Contractor's Construction Schedule compared to the schedule without approval of the substitution. Indicate the effect of the proposed substitution on the overall Contract Time.
 - f. Cost information, including a proposal of the net change, if any in the Contract Sum. **Substitutions requests submitted more than 60 days after Notice to Proceed must be accompanied by a credit proposal.**
 - g. Contractor's certification that the proposed substitution conforms to all requirements of the Contract Documents in every respect and is appropriate for the application indicated.
 - h. Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of the failure of the substitution to perform adequately.
 - i. Contractor's Certification that all costs of other prime contractors which are covered by the substitution will be borne by the substituting contractor.
 4. Architect's Action: Architect will notify Contractor of acceptance or rejection of the substitution within two (2) weeks of receipt of the substitution request. If necessary, Architect will request additional information or documentation for evaluation within one (1) week of receipt of a request for substitution.
 - a. Use the Product specified if Architect cannot make a decision on the use of a proposed substitution within the time allocated. Following acceptance of the substitution, Contractor shall submit related information and Product Data in accordance with Division 1 Section "Submittals".

- b. No claim for additional cost or time will be considered as a result of time for considering substitutions by Contractor.
- B. Conditions for Consideration: Architect will receive and consider Contractor's request for substitution when one or more of the following conditions are satisfied, as solely determined by Architect. Requests will be returned with **no action taken** if none of the following conditions are satisfied.
 - 1. Extensive revisions to the Contract Documents are not required.
 - 2. Proposed changes are in keeping with the general intent of the Contract Documents.
 - 3. The specified Product cannot be provided within the Contract Time. Architect will not consider a substitution request if the specified product cannot be provided as a result of Contractor's failure to pursue the work promptly.
 - 4. The requested substitution offers Owner a substantial advantage in cost, time, or energy conservation.
 - 5. The specified Product cannot receive necessary approval by a governing authority.
 - 6. The specified Product cannot be provided in a manner that is compatible with other materials and where Contractor certifies that the substitution will overcome the incompatibility.
 - 7. The specified Product cannot be coordinated with other materials and where Contractor certifies that the proposed substitution can be coordinated.
 - 8. The specified Product cannot provide a warranty required by the Contract Documents and where Contractor certifies that the proposed substitution provides the required warranty.
- C. Conditions for Acceptance: Following evaluation by Architect, and in accordance with a Change Order, Contractor may make a substitution only with the consent of Owner.

END OF SECTION 012500

SUBSTITUTION REQUEST FORM
(Attach to all requests for substitution)

PROJECT NAME AND NUMBER

Additions & Renovations to Coopertown Elementary School (3758)

ARCHITECT



Crabtree, Rohrbaugh & Associates - Architects

401 East Winding Hill Road
Mechanicsburg, PA 17055
Pennsylvania • Maryland • Virginia • West Virginia

SECTION

PARAGRAPH

SPECIFIED ITEM

PROPOSED SUBSTITUTION

The attached includes Product Data, Specifications, Drawings, Photographs, and performance and test data adequate for evaluation of the request. Applicable portions of the data are clearly identified.

The attached data also includes a description of changes to the Contract Documents which the requested Substitution will require for its proper installation.

Contractor certifies that the following paragraphs, unless modified on attachments, are correct:

1. The requested Substitution does not affect the dimensions shown on Drawings.
2. The requested Substitution does not change the building design, including engineering design or detailing.
3. The requested Substitution has no adverse effect (including additional scope of work or cost increase) on any other trades, Contractor's Construction Schedule or any specified Warranty requirements.
4. Maintenance and service parts will be locally available for the requested Substitution.
5. The requested Substitution offers Owner a substantial advantage, in cost, time, or energy conservation.

Contractor further certifies that the function, appearance, quality and warranty of the requested Substitution are equivalent or superior to those of the specified item.

CONTRACTOR'S CERTIFICATION:

Signature: _____ Date: _____

Firm: _____

Address: _____

Proposed Credit: \$ _____

Attachments:

SECTION 012600 - MODIFICATION PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section specifies administrative and procedural requirements for handling and processing contract modifications.
 - 1. Multiple Prime Contracts: Provisions of this Section apply to the work of each prime contractor.
- B. Related Sections: The following Sections contain requirements that relate to this Section:
 - 1. Division 1 Section "Unit Prices" for administrative requirements governing use of unit prices.
 - 2. Division 1 Section "Submittals" for requirements for Contractor's Construction Schedule.
 - 3. Division 1 Section "Substitutions" for administrative procedures for handling requests for substitutions.

1.3 MINOR CHANGES IN THE WORK

- A. Architect will issue supplemental instructions authorizing minor changes in the Work, not involving adjustment to the Contract Sum or Contract Time.

1.4 CHANGE ORDER PROPOSAL REQUESTS

- A. Owner-Initiated Proposal Requests: Architect will issue a detailed description of proposed changes in the Work that will require adjustment to the Contract Sum or Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.
 - 1. Proposal requests issued by Architect are for information only. Do not consider them as an instruction either to stop work in progress or to execute the proposed change.
 - 2. Within 14 calendar days of receipt of a proposal request, submit a detailed estimate of costs necessary to execute the change to Architect for Owner's review.
 - a. Include a list of quantities of products required and unit costs, with the total amount of purchases to be made. Where requested, furnish survey data to substantiate quantities.

- b. Include the costs of labor and supervision DIRECTLY attributable to the requested change. Contractor's proposal MUST include hours and applicable rates.
- c. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
- d. Include a statement indicating the effect the proposed change in the Work will have on the Contract Time.

1) Perform a Time Impact Analysis to demonstrate that the adjustment to Contract Time is the net due to Contractor, and takes into account any contribution Contractor, or other Contractors, may have had.

- a) Additional Contract Time will be approved only if either the critical path is extended and the date of Substantial Completion is delayed, or a new critical path replaces the previous critical path and the date of Substantial Completion is delayed.
- b) Use available float before requesting an extension of the Contract Time.

B. Contractor-Initiated Proposal Requests: When latent or unforeseen conditions require modifications to the Contract, Contractor may propose changes by submitting a detailed request for a change to Architect.

- 1 Include a statement outlining the reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and Contract Time.
- 2 Include a list of quantities of products required and unit costs, with the total amount of purchases to be made. Where requested, furnish survey data to substantiate quantities.
- 3 Include the costs of labor and supervision DIRECTLY attributable to the requested change. Contractor's proposal MUST include hours and applicable rates.
 - a. Refer to Section 000750, Article 7 for detailed information on calculating costs for proposal requests.
- 4 Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
- 5 Comply with requirements in Division 1 Section "Substitutions" if the proposed change requires substitution of one product or system for a product or system specified.

1.5 CONSTRUCTION CHANGE DIRECTIVE

A. Construction Change Directive: When Owner and Contractor disagree on the terms of a Proposal Request, Architect may issue a Construction Change Directive. The Construction Change Directive instructs Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.

- 1 The Construction Change Directive contains a complete description of the change in the Work. It also designates the method to be followed to determine a change in the Contract Sum or Contract Time.

- B. Documentation: Maintain detailed records on a time and material basis of work required by the Construction Change Directive.

- 1. After completion of the change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

1.6 CHANGE ORDER PROCEDURES

- A. Upon Owner's approval of a Proposal Request, Architect will issue a Change Order for signatures of Owner and Contractor.

END OF SECTION 012600

SECTION 012700 - CUTTING AND PATCHING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes procedural requirements for cutting and patching.
- B. Field verify existing conditions prior to proceeding with cutting and patching. Notify Architect in writing of any conditions that are significantly different from those indicated on Drawings
- C. Related Sections: The following Sections contain requirements that relate to this Section:
 - 1. Division 1 Section "Project Coordination" for procedures for coordinating cutting and patching with other construction activities, and for required coordination drawings.
 - 2. Division 1 Section "Selective Demolition" for demolition of selected portions of the building.
 - 3. Division 1 Section "Project Meetings" for meeting procedures for the required Cutting and Patching Conference.
 - 4. Divisions 2 through 33 Sections for specific requirements and limitations applicable to cutting and patching individual parts of Work.
 - 5. Division 7 Section "Through Penetration Firestop Systems" for patching fire-rated construction.

1.3 DEFINITIONS

- A. Cutting: Removal of in-place construction necessary to permit installation or performance of other work.
- B. Patching: Fitting and repair work required to restore surfaces to original conditions after installation of other work.

1.4 GENERAL

- A. Build sleeves and anchors into work for the proper engagement of the Work.
 - 1. General Contractor shall build sleeves and anchors into the Work for the proper engagement of the Work of other prime contractors, provided the sleeves and anchors, along with installation instructions are furnished at the proper time. Those that fail to comply with this provision shall do all necessary cutting and patching at their own expense. Coordinate requirements in accordance with Division 1 Section "Project Coordination", and at the required Cutting and Patching Conference.

- B. Coordinate and provide chases, openings and recesses in new work to avoid cutting and patching to the greatest extent possible.
 - 1. General Contractor shall provide chases, openings (including required lintels) and recesses in new work, as required, provided that other prime contractors furnish the necessary information at the proper time. Those that fail to comply with this provision shall do all necessary cutting and patching at their own expense. Coordinate requirements in accordance with Division 1 Section "Project Coordination", and at the required Cutting and Patching Conference.
- C. Perform all cutting necessary to install Work. Cutting of structural members will not be permitted except by written permission of Architect.
 - 1. Each Prime Contractor shall do all required cutting and patching of existing construction necessary to install their Work. The prime contractor, whose Work necessitates the need for the cutting and patching through existing construction, i.e., a duct penetration through existing roof deck or an existing wall (including required lintels) shall be the responsible contractor to perform the cutting and patching, regardless if incidental or related Work of another prime contractor is shown in the required opening.
- D. Responsibilities for cutting and patching where roofing work is involved, shall be as follows:
 - 1. New Construction: General Contractor shall provide and prepare required openings in new Work, including all wood blocking, for the proper engagement of Work of the other prime contractors. Upon completion of Work by other prime contractors affecting roofing work, General Contractor shall perform all required roofing work.
 - 2. Existing Construction Where New Roofing is Involved: The prime contractor whose Work necessitates the need for cutting and patching of existing construction, i.e., a duct penetration through existing roof deck, shall be responsible to perform all cutting and patching, except for patching of the roofing assembly, i.e., wood blocking, insulation, roofing membrane, flashing, etc. General Contractor shall support edges of the new opening whether shown on the structural drawings or not, i.e., new steel angle deck supports at perimeter of opening. General Contractor shall also perform all required work of the new roofing assembly, i.e., wood blocking, insulation, roofing membrane, flashing, etc., as part of the new roofing Work. In the event that the new roofing Work is limited to new roof membrane and flashing only, where the existing insulation is specified to remain, the prime contractor performing the cutting, shall patch the insulation as required.
 - 3. Existing Construction Where Existing Roofing is to Remain: The prime contractor whose Work necessitates the need for cutting and patching of existing construction, i.e., a duct penetration through existing roof deck, shall be responsible to perform all cutting and patching, including patching of the existing roofing assembly, i.e., insulation, roofing membrane, flashing, etc. General Contractor shall support edges of the new opening whether shown on the structural drawings or not, i.e., new steel angle deck supports at perimeter of opening and shall provide and install all wood blocking.
- E. Responsibilities for cutting and patching of existing construction where louvers provided by General Contractor are involved, shall be as follows:

1. New Construction: General Contractor shall provide and prepare required openings in new Work, including all lintels, necessary wood blocking, through-wall flashings, etc. for the proper engagement of Work of other prime contractors. Upon completion of Work by other prime contractors affecting louvers provided by General Contractor, General Contractor shall perform all finishing work required for the openings and shall install the louvers.
 2. Existing Construction: General Contractor shall cut and prepare required openings in existing construction for the full thickness of the existing construction, and shall provide and install all lintels, necessary wood blocking, through-wall flashings, etc. for the proper engagement of Work of other prime contractors (i.e. ductwork, etc.) at both interior and exterior walls. Upon completion of Work by other prime contractors affecting louvers provided by General Contractor, General Contractor shall perform all finishing work required for the openings, including, but not limited to, patching (toothing in) all masonry, exterior veneers or finishes of any type and any interior finishes, including joint sealants, and shall install the louvers.
- F. Responsibilities for cutting and patching of existing construction where louvers provided by HVAC Contractor are involved, shall be as follows:
1. Existing Construction: Where HVAC Contractor is responsible to provide louvers, brick vents, etc., HVAC Contractor shall provide all cutting, preparing and patching of all existing construction, including, but not limited to, all lintels, necessary wood blocking, flashings, etc. for the proper engagement of their own Work, and shall install the louvers, brick vents, etc.
- G. Patching and repair at own expense, all surfaces cut into or damaged as a result of Work.
1. Each prime contractor shall patch and repair at their own expense, all existing surfaces cut into, or damaged as a result of their Work using skilled mechanics of the proper trades, and to the satisfaction of Architect.
 2. All cutting of new construction that is made necessary by ill-timed work or lack of coordination, shall be patched and repaired by the responsible prime contractor at their own expense, using skilled mechanics of the proper trades, and to the satisfaction of Architect.

1.5 SUBMITTALS

- A. Cutting and Patching Proposal: Submit a Proposal describing procedures at least seven (7) days prior to the required Cutting and Patching Conference described below, requesting approval to proceed. Include the following information:
1. Describe the extent of cutting and patching, show how it will be performed, and indicate why it cannot be avoided.
 2. Describe anticipated results or changes to in-place construction. Include changes to structural elements and operating components as well as changes in the building's appearance and other significant visual elements.
 3. List Products to be used and firms or entities that will perform the work.
 4. Indicate dates when cutting and patching will be performed.

5. List utility services and mechanical and electrical systems that cutting and patching procedures will disturb or affect. List services/systems that will be relocated and those that will be temporarily out of service. Indicate how long services/systems will be disrupted.
6. Where cutting and patching involves adding reinforcement to structural elements, submit details and engineering calculations showing integration of reinforcement with original structure.
7. Means and methods of all cutting and patching work shall be the sole responsibility of the prime contractor performing the cutting and patching.
8. Obtain approval of Architect of the Cutting and Patching Proposal before proceeding with cutting and patching. Approval does not waive Architect's right to later require removal and replacement of unsatisfactory work.

1.6 QUALITY ASSURANCE

- A. Structural Elements: Do not cut and patch structural elements in a manner that could change their load-carrying capacity or load-deflection ratio.
- B. Operational Elements: Do not cut and patch operating elements and related components in a manner that results in reducing their capacity to perform as intended or that results in increased maintenance or decreased operational life or safety. Operating elements include the following:
 1. Primary operational systems and equipment.
 2. Air or smoke barriers
 3. Mechanical systems, piping and ducts.
 4. Fire protection systems.
 5. Control systems.
 6. Communication systems.
 7. Conveying systems
 8. Electrical wiring systems.
 9. Operating systems of special construction in Division 13 Sections.
- C. Miscellaneous Elements: Do not cut and patch miscellaneous elements or related components in a manner that could change their load-carrying capacity, that results in reducing their capacity to perform as intended, or that results in increased maintenance or decreased operational life or safety. Miscellaneous elements include, but are not limited, to the following:
 1. Water, moisture, or vapor barriers.
 2. Membranes and flashings.
 3. Exterior storefront construction.
 4. Equipment supports.
 5. Piping, ductwork, vessels, and equipment.
 6. Noise and vibration control elements and systems.
- D. Visual Requirements: Do not cut and patch construction exposed on the exterior, in occupied spaces, or in other exposed to view locations in a manner, in Architect's sole opinion, that results in visual evidence of cutting and patching or that would otherwise reduce the

building's aesthetic qualities. Remove and replace construction that has been cut and patched in a visually unsatisfactory manner

- E. Cutting and Patching Conference: Meet at Project site with parties involved in cutting and patching, including mechanical and electrical trades. Review the previously submitted Cutting and Patching Proposal and areas of potential interference and conflict. Coordinate procedures and resolve potential conflicts before proceeding with work.

1.7 WARRANTY

- A. Warranties: Remove, replace, patch and repair materials and surfaces cut or damaged during cutting and patching operations, by methods and with materials so as not to void existing Warranties.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. General: Comply with requirements specified in other Sections.
- B. In-Place Materials: Use materials identical to in-place materials. For exposed surfaces, use materials that visually match in-place adjacent surfaces to the greatest extent possible.
 - 1. If identical materials are unavailable or cannot be used, use materials that in Architect's opinion, when installed, will match the visual and functional performance of in-place materials.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine surfaces to be cut and patched and conditions under which cutting and patching are to be performed.
 - 1. Compatibility: Before patching, verify compatibility with and suitability of substrates, including compatibility with in-place finishes or primers.
 - 2. Proceed with installation only after unsafe or unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Temporary Support: Provide temporary support of work to be cut.
- B. Protection: Protect in-place construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of Project that might be exposed during cutting and patching operations.

- C. Adjoining Areas: Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.
- D. Utility Services and Mechanical/Electrical Systems: Where services/systems are required to be removed, relocated, or abandoned, bypass such services/systems before cutting to prevent interruption to occupied areas.

3.3 PERFORMANCE

- A. General: Employ skilled mechanics and workers specifically trained in the trades required to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time and complete cutting and patching operations without delay.
 - 1. Cut in-place construction to provide for installation of other components or performance of other construction, and subsequently patch as required to restore surfaces to their original condition.
- B. Cutting: Cut in-place construction by sawing, drilling, breaking, chipping, grinding, and similar operations, including excavation, using methods least likely to damage elements retained or adjoining construction.
 - 1. In general, use hand or small power tools designed for sawing and grinding, not hammering and chopping. Cut holes and slots as small as possible, neatly to size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
 - 2. Cut or drill finished surfaces from the exposed or finished side into concealed surfaces.
 - 3. Cut concrete and masonry using a cutting machine such as an abrasive saw or a diamond-core drill.
 - 4. For excavating and backfilling, comply with requirements in applicable Division 31 Sections where required by cutting and patching operations.
 - 5. For mechanical and electrical services, cut off pipe or conduit in walls or partitions to be removed. Cap, valve, or plug and seal remaining portion of pipe or conduit to prevent entrance of moisture or other foreign matter after cutting.
 - 6. Proceed with patching after construction operations requiring cutting are complete.
- C. Patching: Patch construction by filling, repairing, refinishing, closing up, and similar operations following performance of other work. Patch with seams that are invisible. Provide materials and comply with installation requirements specified in other Sections.
 - 1. Test and inspect patched areas after completion to demonstrate integrity of installation.
 - 2. Restore exposed finishes of patched areas and extend finish into retained adjoining construction in a manner that will eliminate evidence of patching and refinishing.
 - 3. Where removing walls or partitions extends one finished area into another, patch and repair floor and wall surfaces. Provide a sound, even surface of uniform color and appearance.
 - a. Where patching occurs in a smooth, painted surface, extend final paint coat over entire unbroken surface containing the patch.

- b. Clean and properly prepare surfaces, piping, conduit, and similar features before applying paint or other finishing materials.
 - c. Restore damaged pipe covering to its original condition.
- D. Clean areas and spaces where cutting and patching are performed. Completely remove paint, mortar, oils, putty and similar materials.

END OF SECTION 012700

SECTION 012800 - FIELD ENGINEERING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. General: This Section specifies administrative and procedural requirements for field-engineering services including, but not limited to, the following:
 - 1. Professional surveying services
- B. Related Sections: The following Sections contain requirements that relate to this Section:
 - 1. Division 1 Section "Project Coordination" for procedures for coordinating field engineering with other construction activities.

1.3 QUALITY ASSURANCE

- A. Surveyor Qualifications: Engage a land surveyor registered in Pennsylvania, to perform required land-surveying services.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify layout information shown on Drawings in relation to the property survey and existing benchmarks before proceeding to lay out the Work. Locate and protect existing benchmarks and control points. Preserve permanent reference points during construction.
 - 1. Do not change or relocate benchmarks or control points without prior written approval. Promptly report lost or destroyed reference points or requirements to relocate reference points because of necessary changes in grades or locations.
 - 2. Promptly replace lost or destroyed Project control points. Base replacements on the original survey control points.

- B. Establish and maintain a minimum of two (2) permanent benchmarks on the site, referenced to data established by survey control points.
 - 1. Record benchmark locations with horizontal and vertical data on Project Record Documents.
- C. Existing Utilities and Equipment: The existence and location of underground and other utilities and construction indicated as existing are not guaranteed. Before beginning sitework, investigate and verify the existence and location of underground utilities, **including private utilities, and other construction. If the location of known or suspected underground utilities cannot be verified, notify Owner and Architect**
 - 1. Prior to construction, verify the location and invert elevation at points of connection of sanitary sewer, storm sewer, and water-service piping.

3.2 PERFORMANCE

- A. Work from lines and levels established by the property survey. Establish benchmarks and markers to set lines and levels at each story of construction and elsewhere as needed to locate each element of the Project. Calculate and measure required dimensions within indicated or recognized tolerances. Do not scale drawings to determine dimensions.
 - 1. Advise entities engaged in construction activities of marked lines and levels provided for their use.
 - 2. As construction proceeds, check every major element for line, level, and plumb.
- B. Surveyor's Log: Maintain a surveyor's log of control and other survey work. Make this log available for reference.
 - 1. Record deviations from required lines and levels, and advise Architect when deviations that exceed indicated or recognized tolerances are detected. On Project Record Drawings, record deviations that are accepted and not corrected.
 - 2. Upon completion of foundation walls, major site improvements, and other work requiring field-engineering services, prepare a certified survey showing dimensions, locations, angles and elevations of construction and sitework.
- C. Site Improvements: Locate and lay out site improvements, including pavements, stakes for grading, fill and topsoil placement, utility slopes, and invert elevations.
- D. Building Lines and Levels: Locate and lay out batter boards for structures, building foundations, column grids and locations, floor levels, and control lines and levels required for mechanical and electrical work.
- E. Existing Utilities: Furnish information necessary to adjust, move or relocate existing structures, utility poles, lines, services or other appurtenances located in or affected by construction. Coordinate with local authorities having jurisdiction.

END OF SECTION 012800

SECTION 012900 - APPLICATIONS FOR PAYMENT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section specifies administrative and procedural requirements governing the Contractor's Applications for Payment.
 - 1. Coordinate the Schedule of Values and Applications for Payment with Contractor's Construction Schedule, Submittal Schedule, and List of Subcontracts.
- B. Related Sections: The following Sections contain requirements that relate to this Section.
 - 1. Division 0 Section "Supplementary General Conditions" for requirements related to Payments and Completion.
 - 2. Division 1 Section "Submittals" for Contractor's Construction Schedule and Submittal Schedule.
 - 3. Division 1 Section "Unit Prices" for administrative requirements governing the use of Unit Prices.
 - 4. Division 1 Section "Modification Procedures" for administrative procedures for handling changes to the Contract.
- C. Attachments: The following documents are attached to the end of this Section.
 - 1. Partial Waiver and Release of Mechanics Lien Claims.
 - 2. Initial Statement of Contract Value
 - 3. Stipulation Against and Waiver of Liens.

1.3 SCHEDULE OF VALUES

- A. Coordination: Coordinate preparation of the Schedule of Values with preparation of Contractor's Construction Schedule. Each prime contractor shall coordinate preparation of its Schedule of Values for its part of the Work with preparation of Contractors' Construction Schedule.
 - 1. Correlate line items in the Schedule of Values with other required administrative schedules and forms, including:
 - a. Contractor's Construction Schedule.

- b. Application for Payment forms, including Continuation Sheets.
 - c. List of subcontractors.
 - d. Schedule of Alternates.
 - e. List of Products.
 - f. List of principal suppliers and fabricators.
 - g. Schedule of Submittals.
 - 2. Submit the Schedule of Values to Architect at the earliest possible date but no later than 7 days before the date scheduled for submittal of the initial Application for Payment.
 - 3. Subschedules: Where Work is separated into phases requiring separately phased payments, provide subschedules showing values correlated with each phase of payment.
- B. Format and Content: Use Project Manual table of contents as a guide to establish the format for the Schedule of Values. Provide at least one line item for each specification section.
- 1. Identification: Include the following project identification on the Schedule of Values:
 - a. Project name and location.
 - b. Name of Architect.
 - c. Project number.
 - d. Contractor's name and address.
 - e. Date of submittal.
 - 2. Arrange the Schedule of Values in tabular form with separate columns to indicate the following for each item listed:
 - a. Related specification section and division.
 - b. Description of Work.
 - c. Name of subcontractor.
 - d. Name of manufacturer or fabricator.
 - e. Name of supplier.
 - f. Change Orders (numbers) that affect value.
 - g. Dollar value.
 - 1) Percentage of Contract Sum to nearest one-hundredth percent, adjusted to total 100 percent.
 - 3. Provide a breakdown of the Contract Sum in sufficient detail to facilitate continued evaluation of Applications for Payment and progress reports. Coordinate with Project Manual table of contents. Break principal subcontract amounts down into several line items.
 - a. Alternates: Provide a separate line item in the Schedule of Values for each Alternate Bid item that was awarded as part of the Contract.
 - b. Bonds and Insurance: Provide a separate line item for Bonds and Insurance.
 - c. Coordination Drawings: Prime contractors for HVAC, plumbing/fire protection, and electrical shall provide a separate line item for Coordination Drawings.

- d. Closeout Procedures: Provide a separate line item for Closeout Documents, Operations and Maintenance Manuals, Owner training, and turnover of extra materials/attic stock.
 - e. Commissioning: Provide a separate line item for Commissioning Support.
- 4. Round amounts to nearest whole dollar; the total shall equal the Contract Sum.
- 5. Provide a separate line item in the Schedule of Values for each part of the Work where Applications for Payment may include materials or equipment, purchased or fabricated and stored, but not yet installed.
 - a. Differentiate between items stored on-site and items stored off-site (if permitted by Owner). Include requirements for insurance and bonded warehousing, if required.
- 6. Provide separate line items on the Schedule of Values for initial cost of the materials, for each subsequent stage of completion, and for total installed value of that part of the Work.
- 7. Schedule Updating: Update and resubmit the Schedule of Values prior to the next Application for Payment when Change Orders or Construction Change Directives result in a change in the Contract Sum.

1.4 APPLICATIONS FOR PAYMENT

- A. Each Application for Payment shall be consistent with previous applications and payments as certified by Architect and paid for by Owner.
 - 1. Each Application for Payment MUST include an attached, executed Partial Waiver and Release of Mechanics Lien Claims Form.
 - a. On the initial Application for Payment, note \$0 on the Payment Amount line and N/A on the Payment Date line of the Partial Waiver and Release of Mechanics Lien Claims Form. For each subsequent Application for Payment, note the amount and date of the prior payment received.
 - b. Contractor shall be responsible to have each subcontractor under their Contract, execute the attached Stipulation Against and Waiver of Liens prior to submittal of the initial Application for Payment.
- B. Payment-Application Times: Draft applications for progress payments shall be presented to Architect no later than the 25th of each month. Architect will comment and return to Contractor for final submission no later than the first of the following month. The period of construction work covered by each Application for Payment is the period indicated in the Agreement.
- C. Payment-Application Forms: Use AIA Document G702 and Continuation Sheets G703 as the form for Applications for Payment.
- D. Application Preparation: Complete every entry on the form. Include notarization and execution by a person authorized to sign legal documents on behalf of Contractor. Architect will return incomplete applications without action.

1. Entries shall match data on the Schedule of Values and Contractor's Construction Schedule. Use updated schedules if revisions were made.
 2. Include amounts of Change Orders and Construction Change Directives issued prior to the last day of the construction period covered by the application.
 3. Include an updated, executed copy of the Partial Waiver and Release of Mechanics Lien Claims Form.
- E. Transmittal: Upon preliminary approval of the draft application by Architect, submit a signed and notarized version of the Application for Payment to Architect via caadmin@cra-architects.com. Architect will input the application into DocuSign for signature and further processing.
1. Provide a transmittal form listing all attachments and recording appropriate information related to the application in a manner acceptable to Architect.
- F. Initial Application for Payment: Administrative actions and/or submittals that must precede or coincide with submittal of initial Application for Payment, include the following:
1. Secure a Stipulation Against and Waiver of Liens Form from each subcontractor.
 2. Execute an Initial Statement of Contract Value.
 3. List of subcontractors.
 4. List of principal suppliers and fabricators.
 5. Schedule of Values.
 6. Contractor's Construction Schedule (preliminary if not final).
 7. Schedule of principal Products.
 8. List of Contractor's staff assignments.
 9. Copies of building permits.
- G. Application for Payment at Substantial Completion: Following issuance of the Certificate of Substantial Completion, submit an Application for Payment.
1. This application shall reflect Certificates of Partial Substantial Completion issued previously for Owner occupancy of designated portions of the Work.
 2. Administrative actions and/or submittals that shall precede or coincide with this application include:
 - a. Occupancy permits and similar approvals.
 - b. Warranties (guarantees) and maintenance agreements.
 - c. Test/adjust/balance records.
 - d. Maintenance instructions.
 - e. Startup performance reports.
 - f. Changeover information related to Owner's occupancy, use, operation, and maintenance.
 - g. Final cleaning.
 - h. Application for reduction of retainage and consent of surety.
 - i. Advice on shifting insurance coverages.
 - j. List of incomplete work, recognized as exceptions to Architect's Certificate of Substantial Completion.

H. Final Payment Application: Administrative actions and/or submittals that must precede or coincide with submittal of the final Application for Payment include the following:

1. Execute a Contractor's Affidavit of Release of Liens Form (AIA Document G706A).
2. Completion of Project closeout requirements.
3. Completion of items specified for completion after Substantial Completion.
4. Ensure that unsettled claims will be settled.
5. Ensure that incomplete Work is not accepted and will be completed without undue delay.
6. Transmittal of required Project construction records to Owner.
7. Removal of temporary facilities and services.
8. Removal of surplus materials, rubbish, and similar elements.
9. Change of door locks to Owner's access.

END OF SECTION 012900

**PARTIAL WAIVER AND RELEASE
OF MECHANICS LIEN CLAIMS**

(Must be executed and attached to Every Application for Payment)

OWNER: School District of Haverford Township

ARCHITECT:



Crabtree, Rohrbaugh & Associates - Architects

401 East Winding Hill Road

Mechanicsburg, PA 17055

Pennsylvania • Maryland • Virginia • West Virginia

CONTRACTOR: _____

PROJECT: Additions & Renovations to Coopertown Elementary School

(legal description attached hereto as Exhibit "A")

PAYMENT AMOUNT: _____

PAYMENT DATE: _____

ORIGINAL CONTRACT AMOUNT: _____

VALUE OF APPROVED CHANGE ORDERS: _____

For and in consideration of the Payment cited above, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the undersigned Contractor does hereby waive, release, and relinquish any and all rights, claims, demands, liens, mechanics liens, claims for relief, causes of action and the like, whether arising at law, under a contract, in tort, in equity or otherwise, which the undersigned has now, may have had or may have in the future, arising out of any payment due or alleged to be due for any Contractor work, labor, or materials provided in connection with Project, through the date hereof.

CONTRACTOR ACKNOWLEDGES THAT ANY CLAIM CONTRACTOR HAS HEREAFTER RELATING TO PAYMENT OR DEMANDS FOR PAYMENT SHALL BE LIMITED TO THE DIFFERENCE BETWEEN THE ORIGINAL CONTRACT SUM AS MODIFIED BY THE VALUE OF APPROVED CHANGE ORDERS LESS THE AMOUNT PAID TO CONTRACTOR THROUGH THE DATE OF ANY SUCH CLAIM.

Contractor warrants that it has not and will not assign any claims for payment or right to perfect any lien against Owner or Project and further warrants that it has the right to execute this waiver and release. Furthermore, Contractor hereby agrees to defend, indemnify and hold harmless Owner from and against all damages and costs that arise from any other entity or person claiming entitlement through Contractor through the Payment Date.

In order to induce Owner to make the Payment referenced herein, Contractor also warrants and certifies that it has made full payment of any amounts due or claimed to be due through the Payment Date to any person or entity who has supplied materials or labor in connection with Project.

The undersigned agrees that Owner of Project, any lender, any title insurer, and any surety may rely upon this waiver.

The undersigned further agrees that the making and receipt of payment and execution of this Waiver and Release shall in no way release the undersigned from its continuing obligations with respect to the completion of any work remaining undone, punch list work, warranty and guaranty work, and any other obligations of the undersigned to Owner.

IN WITNESS WHEREOF, on behalf of the undersigned, Contractor executes this Partial Waiver and Release of Mechanics Liens on the date first written above.

CONTRACTOR: _____

By: _____

Title: _____

Sworn to and subscribed before me this ____ day of _____, 20____.

My commission expires: _____

Notary Public

INITIAL STATEMENT OF CONTRACT VALUE

(To be executed by each Prime Contractor and submitted to Architect for filing)

ARCHITECT:



Crabtree, Rohrbaugh & Associates - Architects

401 East Winding Hill Road

Mechanicsburg, PA 17055

Pennsylvania • Maryland • Virginia • West Virginia

OWNER: The School District of Haverford Township

In the Court of Common Pleas Delaware County, Pennsylvania

Plaintiffs :

:

v. : No. _____
:

PRIME CONTRACTOR: _____

:

Defendant :

PRIME CONTRACTOR: _____

:

Plaintiff :

:

v. :
:

OWNER: The School District of Haverford Township

:

Defendant :

NOTICE PURSUANT TO 49 P.S. §1405

1. Owner is the legal or equitable owner of certain real estate known as Insert Project Address Here by deed dated Insert Deed Date Here, and recorded Insert Recording Date Here, in the Office of the Recorder of Deeds of County, Pennsylvania, in Book Insert Book Number, page Insert Page Number (hereinafter the "Property").
2. Prime Contractor, is "Contractor" as defined in 49 P.S. §1201, Pennsylvania Mechanics' Lien Law of 1963.

3. Owner and Contractor have entered into a contract for the construction of a building on the Property (hereinafter the "Contract") in which Owner is Owner as defined in 49 P.S. §1201, Pennsylvania Mechanics' Lien Law of 1963, and Prime Contractor is Contractor.
4. For the specific purpose of limiting the potential mechanics lien claims of Owner's or Contractor's subcontractors as against Owner to any such subcontractor's/claimant's pro-rata share of the unpaid balance of the contract price set forth in the Contract, the parties hereto file this Notice.
5. The Contract is dated _____ by and between Owner and Contractor.
6. The Contract contemplates the construction of a building containing approximately 91,170 square feet to be constructed on the Property.
7. The total price of the Contract, as modified hereafter by any material change orders, is _____.
8. Any claim by any subcontractor/claimant shall be limited to its pro-rata share of the contract price remaining unpaid at the time notice of intention to file any such claim is first given to Owner.

By: Owner

By: _____
Authorized Officer

By: Prime Contractor

By: _____
Authorized Officer

STIPULATION AGAINST AND WAIVER OF LIENS

(Executed by Contractor and each subcontractor prior to submittal of the
INITIAL Application for Payment)

(Each Contractor shall attain and file this Stipulation for each of their respective subcontractors)

ARCHITECT:



Crabtree, Rohrbaugh & Associates - Architects

401 East Winding Hill Road
Mechanicsburg, PA 17055
Pennsylvania • Maryland • Virginia • West Virginia

This instrument is executed this ____ day of _____, 20____, by and between

_____ and
("Contractor")

_____ in favor of
("Subcontractor")

The School District of Haverford Township

("Owner")

WITNESSETH:

1. Contractor is a Contractor within the meaning of the Mechanics Lien Law of 1963.
2. Owner and Contractor have entered into a certain contract (herein "Contract") in connection with the construction of Additions & Renovations to Coopertown Elementary School 400 Allston Road, Havertown, PA 19083 (herein "Project").
3. Contractor and Subcontractor have entered into a certain agreement by which Subcontractor will provide labor or materials to Contractor or Owner in connection with the construction of Project.
4. Pursuant to 49 P.S. §1401(b)(2), Contractor has posted a bond guaranteeing payment for labor and materials provided by Subcontractor, and Subcontractor, for itself, its owners, shareholders, members, employees, partners, successors, and assigns, intends by this document to waive its right to file any claim whatsoever against Project.
5. Subcontractor agrees that to the fullest extent permitted by law, no mechanics' or materialmen's liens shall be filed or maintained against the estate or title of Owner of Project or any part thereof, or the appurtenances thereto, either by itself or anyone else acting or claiming through or under it, including subcontractors of Subcontractor, for or on account of any work, labor or materials supplied in the performance of the Work under the Contract or under any supplemental contract or for extra work.
6. Subcontractor agrees that this agreement shall be an independent covenant and shall operate and be effective with respect to work done and materials furnished under any supplemental contract and for any extra work in connection with the above-described Project.

7. Subcontractor agrees that it will indemnify, defend, and hold harmless Contractor and Owner from it against any claims, including mechanics' lien claims raised by any subcontractor, supplier, or materialman of Subcontractor, including, without limitation, any subcontractor as that term is defined in the Pennsylvania Mechanics' Lien Law of 1963, as amended.
8. Subcontractor agrees that in the event it violates any provision of this Stipulation Against and Waiver of Liens, Subcontractor shall be liable to Contractor and Owner for all expenses and costs incurred in the defense of or payment of any claim brought by any person, to the extent the Subcontractor has indemnified Contractor and Owner against such a claim, including without limitation, attorneys fees and court costs.
9. To give Owner full power and authority to protect itself, Project, estate, or title of Owner therein, and the appurtenances thereto, against any and all liens filed by anyone acting under or through Subcontractor in violation of the terms of this agreement, Subcontractor hereby irrevocably authorizes and empowers any attorney of any Court of Common Pleas of the Commonwealth of Pennsylvania (i) to appear as attorney for it in any such Court, and in its name or names, to the extent permitted by law, mark satisfied of record at the cost and expense of Subcontractor any and all lien or liens filed in violation of the foregoing covenant, or (ii) to cause to be filed and served in connection with such lien or liens any pleading or instrument, or any amendment to any pleading or instrument previously filed by it, and to incorporate therein, as part of the record, the waiver contained in this instrument; and for such act or acts this instrument shall be good and sufficient warrant and authority. A reference to the court, term and number in which and where this agreement shall have been filed shall be conclusive evidence of the authority herein to warrant such action, and Subcontractor hereby remises, releases and quitclaims all rights and all manner of errors, defects and imperfections whatsoever in entering such satisfaction or in filing such pleading, instrument or amendment, or in any way concerning them.
10. **Contractor must attach a copy of the Legal Description of Project property to this form prior to submittal to Architect.**

IN WITNESS WHEREOF, Contractor has executed this instrument as of the day and year first above written.

CONTRACTOR: _____

By: _____

Its: _____

SUBCONTRACTOR: _____

By: _____

Its: _____

SECTION 013100 – PROJECT COORDINATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and supervisory requirements necessary for coordinating construction operations on Project to be collectively fulfilled by the Contractors including, but not limited to, the following:
 - 1. General project coordination procedures.
 - 2. Conservation.
 - 3. Coordination drawings.
 - 4. Administrative and supervisory personnel.
 - 5. Cleaning and protection.
- B. Where applicable, each Prime Contractor shall participate in these coordination requirements. General Contractor shall be assigned the responsibility for overall coordination.
- C. Related Sections: The following Sections contain requirements that relate to this Section:
 - 1. Division 1 Section "Field Engineering" specifies procedures for field-engineering services, including establishment of benchmarks and control points.
 - 2. Division 1 Section "Cutting and Patching" for cutting and patching procedures. Division 1 Section "Project Meetings" for progress meetings, coordination meetings, and preinstallation conferences.
 - 4. Division 1 Section "Submittals" for preparing and submitting the Contractor's Construction Schedule.
 - 5. Division 1 Section "Contract Closeout" for coordinating contract closeout procedures.
 - 6. Division 4 Section "Unit Masonry Assemblies" for Masonry Preinstallation Shop Drawing requirements.
 - 7. Division 21 through 28 Sections for specific coordination drawing requirements for mechanical and electrical installations.

1.3 GENERAL PROJECT COORDINATION PROCEDURES

- A. General Contractor is designated as Lead Prime Contractor for Project. Each Prime Contractor shall coordinate its construction activities with those of the other prime contractors and other entities involved to assure efficient and orderly installation of each part of the Work. Each Prime

Contractor shall coordinate its operations with operations included under different Sections of the Specifications that depend on each other for proper installation, connection, and operation.

1. Each Prime Contractor shall schedule its construction operations in the sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
 2. Where availability of space is limited, each Prime Contractor shall coordinate installation of different components with other prime contractor to assure maximum accessibility for required maintenance, service, and repair.
 3. Each Prime Contractor shall make adequate provisions to accommodate items scheduled for later installation.
- B. Each Prime Contractor shall participate in these coordination requirements. Each Prime Contractor shall advise Owner and Architect of overall coordination progress. When necessary, such as in congested spaces where multiple prime contracts are involved, the prime contractors shall meet with Owner and Architect and other prime contractors involved to resolve critical coordination issues. Specific responsibilities are assigned to each prime contractor.
- C. Owner will not consider requests for additional time or compensation associated with direction provided to prime contractors in response to coordination, questions, or disputes.
- D. Where necessary, prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and attendance at meetings.
1. Prepare similar memoranda for Owner and separate contractors where coordination of their work is required.
- E. Administrative Procedures: Each Prime Contractor shall coordinate scheduling and timing of its required administrative procedures with other construction activities and activities of other prime contractors to avoid conflicts and assure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:
1. Preparation of schedules.
 2. Installation and removal of temporary facilities.
 3. Delivery and processing of submittals.
 4. Progress meetings.
 5. Project closeout activities.

1.4 CONSERVATION

- A. Each Prime Contractor shall coordinate construction activities to assure that operations are carried out with consideration given to conservation of energy, water and materials.
1. Salvage materials and equipment involved in performance of, but not actually incorporated in, the Work.

1.5 COORDINATION DRAWINGS

- A. Prepare Coordination Drawings where careful coordination is needed for installation of products and materials fabricated and/or installed by separate entities. Prepare Coordination Drawings where limited space availability necessitates efficient installation of different components.
- B. Coordination Drawings shall be completed **within 60 calendar days of the date of Notice to Proceed**. Prime Contractors shall include preparation of Coordination Drawings in their Contract Price and shall indicate the value of this effort as a line item on their Schedule of Values
 - 1. Refer to Division 21 through 28 Sections for specific Coordination Drawing requirements for mechanical and electrical installations.
 - 2. Responsibility: All Prime Contractors shall participate in the preparation of coordination drawings. HVAC Contractor shall have the lead role in this process and shall initiate Coordination Drawings by producing preliminary 1/4-inch scale drawings, by building section, in electronic format. Electronic media, in the format, and to the terms specified in Paragraph 3.12 of Section 000750 Supplementary General Conditions, is available from Architect. **HVAC Contractor shall be responsible for all costs to obtain the required sheets for Coordination Drawings.** This media will include walls, partitions, structural elements, finished floor elevations, ductwork, piping, and equipment locations and layout. The preliminary Coordination Drawings shall be provided to the other Prime Contractors, one at a time, in an order established by General Contractor, for inclusion, layout and interface of all relative equipment, material and penetrations associated with the Work.
 - 3. Upon completion of the preliminary Coordination Drawings, HVAC Contractor shall schedule a coordination meeting with all Prime Contractors in order to resolve all interference issues. This meeting shall be held in accordance with Division 1 Section "Project Meetings". Altering structural elements, bearing elevations, established dimensions, partition locations and ceiling/bulkhead heights or any other aesthetic effect is prohibited without the consent of Architect.
 - 4. Upon resolution of all interference issues, HVAC Contractor shall revise the Coordination Drawings as required and upon acceptance by all Prime Contractors, HVAC Contractor shall issue a set of final Coordination Drawings to all Prime Contractors, Owner and Architect.
 - 5. Utility sleeve locations through foundation walls shall be coordinated in the field by the involved Prime Contractors. Utility sleeve locations may be included on the Coordination Drawings only to the extent to establish piping entry locations.

1.6 ADMINISTRATIVE AND SUPERVISORY PERSONNEL

- A. General: In addition to its full-time on-site Project Superintendent, each Prime Contractor shall provide other administrative and supervisory personnel as required for proper performance of the Work. Include special personnel required for coordination of operations with other Prime Contractors.
- B. Project Coordinator: The Contractor for General Construction shall provide a full-time Project Coordinator, experienced in administration and supervision of building construction, including

mechanical and electrical work. The Project Coordinator shall be authorized to act as the coordinator of construction activities between the separate Prime Contracts.

1. Construction activities requiring coordination by the Project Coordinator include, but are not limited to, the following:
 - a. Scheduling and sequencing the Work.
 - b. Sharing access to work spaces.
 - c. Installations.
 - d. Protection of each other's work.
 - e. Cutting and patching.
 - f. Selections for compatibility.
 - g. Coordination drawings.
 - h. Inspections and tests.
 - i. Temporary services and facilities.
 - j. Daily project clean up activities.
- C. Plumbing, HVAC and Electrical Representative: The Plumbing, HVAC and Electrical Contractors shall provide representatives experienced in coordination of mechanical and electrical construction. This experience shall include coordination of the type of operations required for this Project.
- D. Staff Names: Within 15 calendar days of commencement of construction operations, each Prime Contractor shall submit a list of its principal staff assignments, including the Superintendent and other personnel in attendance at the Project Site. Identify individuals and their duties and responsibilities and provide their addresses and telephone numbers.
 1. Post copies of the list in the Project meeting room, the temporary field office, and at each temporary telephone.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

3.1 GENERAL COORDINATION PROVISIONS

- A. Inspection of Conditions: Prime Contractor involved shall require the installer of each major component to inspect both the substrate and conditions under which work is to be performed. Do not proceed until unsatisfactory conditions have been corrected in an acceptable manner.

3.2 CLEANING AND PROTECTION

- A. Clean and protect construction in progress and adjoining materials in place during handling and installation. Apply protective covering where required to assure protection from damage or deterioration until Substantial Completion.

- B. Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to assure operability without damaging effects.
- C. Limiting Exposures: Each Prime Contractor shall supervise its construction operations to assure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period. Where applicable, such exposures include, but are not limited to, the following:
 - 1. Thermal shock.
 - 2. Excessively high or low humidity.
 - 3. Air contamination or pollution.
 - 4. Water or ice.
 - 5. Solvents.
 - 6. Chemicals.
 - 7. Light.
 - 8. Radiation.
 - 9. Puncture.
 - 10. Abrasion.
 - 11. Heavy traffic.
 - 12. Soiling, staining, and corrosion.
 - 13. Bacteria.
 - 14. Rodent and insect infestation.
 - 15. Combustion.
 - 16. Electrical current.
 - 17. High-speed operation.
 - 18. Improper lubrication.
 - 19. Unusual wear or other misuse.
 - 20. Contact between incompatible materials.
 - 21. Destructive testing.
 - 22. Misalignment.
 - 23. Excessive weathering.
 - 24. Unprotected storage.
 - 25. Improper shipping or handling.
 - 26. Theft.
 - 27. Vandalism.

Any work subjected to such exposures shall be tested, corrected and/or replaced at the expense of Contractor, in accordance with Division 0 Section "General Conditions of the Contract for Construction".

- D. Daily project clean up shall be the responsibility of each Prime Contractor.

END OF SECTION 013100

SECTION 013150 - PROJECT MEETINGS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section specifies administrative and procedural requirements for project meetings, including, but not limited to, the following:
 - 1. Preconstruction conferences.
 - 2. Preinstallation conferences.
 - 3. Progress meetings.
 - 4. Coordination meetings.
- B. Related Sections: The following Sections contain requirements that relate to this Section:
 - 1. Division 1 Section "Project Coordination" for procedures for coordinating project meetings with other construction activities.
 - 2. Division 1 Section "Submittals" for submitting Contractor's Construction Schedule.

1.3 PRECONSTRUCTION CONFERENCE

- A. Within 15 calendar days of the date of Notice to Proceed, Architect shall schedule and conduct a Preconstruction Conference at a time convenient to Owner. The Preconstruction Conference will be held at Project Site or another convenient location. The purpose of this meeting will be to review the responsibilities and other requirements of Prime Contractors.
- B. Attendees: Authorized representatives of Owner, Architect and their consultants, Contractor and its Superintendent, major subcontractors, manufacturers and suppliers. All participants at the Preconstruction Conference shall be familiar with Project and authorized to conclude matters relating to the Work.
- C. Agenda: Discuss items of significance including the following:
 - 1. Construction schedule.
 - 2. Critical work sequencing.
 - 3. Designation of responsible personnel.
 - 4. Procedures for processing field decisions and Change Orders.
 - 5. Procedures for processing Applications for Payment.
 - 6. Distribution of Contract Documents.

7. Submittal of Shop Drawings, Product Data, and Samples.
8. Preparation of record documents.
9. Use of the premises.
10. Parking availability.
11. Office, work, and storage areas.
12. Equipment deliveries and priorities.
13. Safety procedures.
14. First aid.
15. Security.
16. Daily clean up activities.
17. Working hours.

1.4 PREINSTALLATION CONFERENCES

- A. Responsible Prime Contractor shall conduct a preinstallation conference at Project Site before each construction activity that requires coordination with other construction and as required by specific specification Sections.
- B. Attendees: The Installer and representatives of manufacturers and fabricators involved in, or affected by the installation, and its coordination or integration with other materials and installations that have preceded or will follow, shall attend the meeting. Advise Architect of scheduled meeting dates.
 1. Review the progress of other construction activities and preparations for the particular activity under consideration at each preinstallation conference, including requirements for the following:
 - a. Contract Documents.
 - b. Options.
 - c. Related Change Orders.
 - d. Purchases.
 - e. Deliveries.
 - f. Shop Drawings, Product Data, and quality-control samples.
 - g. Review of mockups.
 - h. Possible conflicts.
 - i. Compatibility problems.
 - j. Time schedules.
 - k. Weather limitations.
 - l. Manufacturer's recommendations.
 - m. Warranty requirements.
 - n. Compatibility of materials.
 - o. Acceptability of substrates.
 - p. Temporary facilities.
 - q. Space and access limitations.
 - r. Governing regulations.
 - s. Safety.
 - t. Inspecting and testing requirements.
 - u. Required performance results.

- v. Recording requirements.
 - w. Protection.
2. Record significant discussions and agreements and disagreements of each conference, and the approved schedule. Promptly distribute a record of the meeting to everyone concerned, including Owner and Architect.
 3. Do not proceed with the installation if the conference cannot be successfully concluded. Initiate whatever actions are necessary to resolve impediments to performance of Work and reconvene the conference at the earliest feasible date.

1.5 PROGRESS MEETINGS

- A. Architect shall conduct progress meetings at Project Site at bi-weekly intervals, unless otherwise needed.
- B. Attendees: In addition to representatives of Owner and Architect, **it is mandatory that each prime contractor be represented at all Progress Meetings.** All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
- C. Agenda: Review and correct or approve minutes of the previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to the status of Project.
 1. Contractor's Construction Schedule: Review construction progress since the last meeting. Determine where each activity is in relation to Contractor's Construction Schedule, whether on time or ahead or behind schedule. Discuss whether schedule revisions are required to insure that current and subsequent activities will be completed within the Contract Time.
 2. Review the present and future needs of each entity present, including the following:
 - a. Interface requirements.
 - b. Time.
 - c. Sequences.
 - d. Status of submittals.
 - e. Deliveries.
 - f. Off-site fabrication problems.
 - g. Access.
 - h. Site utilization.
 - i. Temporary facilities and services.
 - j. Hours of work.
 - k. Hazards and risks.
 - l. Daily clean up activities.
 - m. Quality and work standards.
 - n. Change Orders.
 - o. Documentation of information for payment requests.
- D. Reporting: Minutes will be distributed by Architect at least 3 calendar days prior to the next meeting to each party present and to parties who should have been present.

1. Schedule Updating: Refer to Division 1 Section "Construction Progress Documentation" for requirements. Issue the revised schedule concurrently with the report of each meeting.

1.6 COORDINATION MEETINGS

- A. Lead Prime Contractor shall conduct coordination meetings a minimum of once every two weeks. Project coordination meetings are in addition to specific meetings held for other purposes, such as regular progress meetings and special preinstallation meetings. **It is mandatory that each prime contractor be represented at all Coordination Meetings.**
- B. Record meeting minutes and distribute copies to everyone in attendance and to others affected by decisions or actions resulting from each meeting. In addition, Owner and Architect shall receive copies of these meeting minutes.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

END OF SECTION 013150

SECTION 013200 - CONSTRUCTION PROGRESS DOCUMENTATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for documenting the progress of construction during performance of the Work, including the following:
 - 1. Owner's Preliminary Project Phasing Narrative
 - 2. Contractor's Construction Schedule
 - 3. Daily construction reports
 - 4. Field condition reports
 - 5. Special reports
- B. Related Sections: The following Sections contain requirements that relate to this Section:
 - 1. Division 1 Section "Project Coordination"
 - 2. Division 1 Section "Applications for Payment" for submitting the Schedule of Values
 - 3. Division 1 Section "Project Meetings" for submitting and distributing meeting and conference minutes
 - 4. Division 1 Section "Quality Requirements" for submitting a schedule of tests and inspections
 - 5. Division 1 Section "Project Record Documents" for submitting Project Record Documents at Project closeout
 - 6. Division 1 Section "Submittals" for procedural requirements regarding the Submittal Schedule
 - 7. Division 1 Section "Temporary Facilities & Controls" for the various stages of Construction relative to temporary heat which must be identified on the Contractor's Construction Schedule.

1.3 DEFINITIONS

- A. Contractor: The term "Contractor", as used throughout this Section, applies to each Contractor entering into a Contract with the Owner.
- B. Activity: A discrete part of a project that can be identified for planning, scheduling, monitoring and controlling the construction project. Activities included in a construction schedule consume time and resources.

1. Critical activities are activities on the critical path. They must start and finish on the planned early start and finish dates.
 2. Predecessor activity is an activity that must be completed before a given activity can be started.
- C. Critical Path Method (CPM): A method of planning and scheduling a construction project where activities are arranged based on activity relationships. Network calculations determine when activities can be performed and the critical path of the Project.
- D. Critical Path: The longest continuous chain of activities through the network schedule that establishes the minimum overall Project duration and contains no float.
- E. Event: The starting or ending point of an activity.
- F. Float: The measure of leeway in starting and completing an activity.
1. Float is not for the exclusive use or benefit of either the Owner or the Contractor. Extensions of the time to interim milestone dates or the Contract Completion Date, under the Contract, will be granted only to the extent that equitable time adjustment to the activity or activities affected by the Contract Modification or delay, exceeds the total float of the affected or subsequent paths and extends any interim milestone date or the Contract Completion date.
 2. Free float is the amount of time an activity can be delayed without adversely affecting the early start of the following activity.
 3. Total float is the measure of leeway in starting or completing an activity without adversely affecting the planned Project completion date.
- G. Fragnet: A partial or fragmentary network that breaks down activities into smaller activities for greater detail.
- H. Major Area: A story of construction, a separate building, or a similar significant construction element.
- I. Milestone: A key or critical point in time for reference or measurement.
- J. Network Diagram: A graphic diagram of a network schedule showing activities and activity relationships.

1.4 SUBMITTALS

- A. Qualification Data: For firms and persons specified in "Quality Assurance" Article and in-house scheduling personnel to demonstrate their capabilities and experience. Include lists of completed projects with project names and addresses, names and addresses of Architects and Owners, and other information specified.
- B. Preliminary Construction Schedule: Submit one (1) copy in an acceptable format as determined by the Architect.

- C. Contractor's Construction Schedule: Submit one (1) paper Gantt Chart and one (1) electronic copy in its native format.
- D. CPM Reports: The Contractor's Construction Schedule shall be a CPM Schedule. Concurrent with the CPM Schedule, submit three (3) printed copies of each of the following computer-generated reports. The format for each activity in the reports shall contain an activity number, activity description, original duration, remaining duration, early start date, early finish date, late start date, late finish date and total float.
 - 1. Activity Report: List of all activities sorted by activity number and then early start date, or actual start date if known.
 - 2. Logic Report: List of preceding and succeeding activities for all activities, sorted in ascending order by activity number and then early start date, or actual start date if known.
 - 3. Total Float Report: List of all activities sorted in ascending order of total float.
- E. Daily Construction Reports: Submit two (2) copies at weekly intervals.
- F. Field Condition Reports: Submit two (2) copies at time of discovery of differing conditions.
- G. Special Reports: Submit two (2) copies at time of unusual event.

1.5 QUALITY ASSURANCE

- A. Scheduling Professional Qualifications: The Contractor's Construction Schedule shall be composed and maintained by an individual having been employed for at least five years primarily as a CPM scheduler or an individual certified as a Planning and Scheduling Professional (PSP) by the Association for the Advancement of Cost Engineering (AACE). Documentation supporting compliance with these requirements shall be supplied to the Architect for review and acceptance.
- B. Prescheduling Conference: Conduct conference at the Project site to comply with requirements in Division 1 Section "Project Meetings". Review methods and procedures related to the Preliminary Construction Schedule and Contractor's Construction Schedule, including, but not limited to, the following:
 - 1. Discuss constraints, including phasing, work stages, area separations and interim milestones.
 - 2. Review delivery dates for Owner-furnished products.
 - 3. Review time required for review of submittals and resubmittals.
 - 4. Review requirements for tests and inspections by independent testing and inspecting agencies.
 - 5. Review time required for completion and startup procedures.
 - 6. Review and finalize the list of construction activities to be included in the schedule.
 - 7. Review submittal requirements and procedures.
 - 8. Review procedures for updating schedules.

1.6 COORDINATION

- A. Coordinate preparation and processing of schedules and reports with performance of construction activities and with scheduling and reporting of separate contractors.
- B. Coordinate the Contractor's Construction Schedule with the Schedule of Values, List of Subcontracts, Submittal Schedule, Progress Reports, Applications for Payment and other required schedules and reports.
 1. Secure time commitments for performing critical elements of the Work from parties involved.
 2. Coordinate each construction activity in the network with other activities and schedule them in proper sequence.

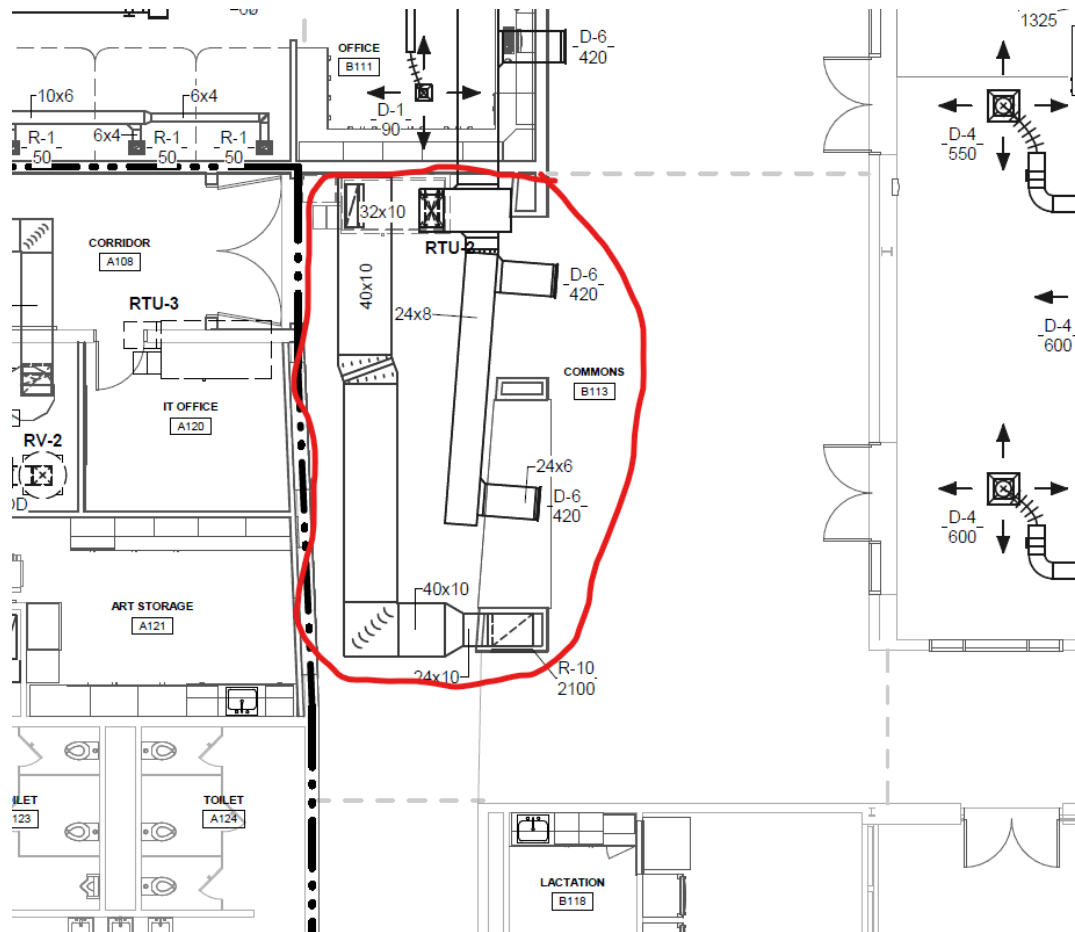
1.7 OWNER'S PRELIMINARY PROJECT PHASING NARRATIVE

- A. Except for the normal summer and holiday schedules, the Coopertown Elementary School will remain in operation and the building will remain open to the public in accordance with the following description of Phases. As a result, the Owner has proposed a detailed Phasing Plan, PH1.1. It is understood that this phasing plan is preliminary in nature and is not intended to represent all of the activities or possible sub-phases that may need to take place in order to complete construction within the Contract Time. The Phasing Plans detailed in Drawing PH1.1 shall set contract requirements for completion dates for phases of the project in conjunction with the substantial and final completion dates set from the Notice to Proceed.
- B. In addition to 1.7.A, contractors shall be responsible for the following milestone completion dates during construction.
- C. Interim Substantial completion dates as follows:

All the dates below are contract milestone dates that must be met and be built into the approved project schedule.

1. Bid award-project approved Board meeting 4/24/25
2. Notice of intent to award Issued 4/25/25
3. Contractors to provide Bonds & COI No later than 5/2/25
4. Contracts issued for signature 5/5/25
5. Contracts to be fully executed No later than 5/9/25
6. Notice to proceed issued 5/9/25
7. Critical Submittals issued for approval by design team listed below- No later than 5/23/25
 - Sitework manholes and piping for phase I summer work
 - Sitework sanitary manholes and piping for phase I summer work
 - All submittals associated with the three additions foundations (rebar, concrete, structural steel)
 - All submittals associated with masonry work for the additions
 - All electrical equipment, panels, switchboards, generator, etc.

8. Critical Submittals issued for approval by design team listed below- No later than 6/6/25
 1. All structural steel shop drawings and calculations, including any loose lintels
 2. All window & glass shop drawings and product data
 3. All HVAC equipment and controls
 4. All cold formed metal framing drawings and calculations
9. All other submittals for the project must be submitted no later than 7/18/25.
10. Two rear additions- Work to start 6/23/25 and be Substantially Complete for the Owner to move in by Friday 2/27/26. The masonry structures of the two additions must be completed no later than 10/3/25. Roof steel structure must be completed no later than 10/17/25. New roof installed and watertight no later than 10/31/25. Roof top units installed and ready to provide temporary conditioning to each rear addition no later than 12/12/25. See site plans for when the construction fencing moves and landscaping restoration is required in that area. After the additions are substantially complete the site laydown area needs to be reduced as shown. All landscaping and grass restoration of the laydown area is to be substantially complete no later than 4/10/26.
11. Front addition- Work to start 6/23/25.
 1. Foundations must be completed no later than 8/1/25. Slab on grade must be done no later than 8/15/25.
 2. Leave out diamonds to install steel columns. All structural steel must be installed no later than Friday 10/3/25. If the steel can be installed prior to 9/2/25 when school starts it can be installed during normal work hours Monday through Friday. If installed after 9/2/25 it needs to be installed on Saturdays and Sundays only unless the logistics can be worked out with the Owner's Representative to do the steel installation Monday through Friday between 9am and 2:30pm. The parking lot and drive lane cannot be blocked by crane or steel trucks during that time.
 3. This addition must have a roof installed and have temporary protection on the windows so the space is weather-tight no later than 10/24/25. Exterior walls and windows with the exception of leave out area for the cattle chute walkway must be completed no later than 12/19/25. RTU's 2 & 4 need to be set and be up and running ready to provide conditioned air no later than 12/19/25. GC to provide temporary enclosure and heat to complete masonry façade work as needed.
 4. Review the phasing plan as the two-story lobby portion of the addition as well as the two-story lobby portion within the existing building footprint are to be Substantially Complete by 2/27/26. For the two-story front lobby space some of the new ductwork runs through the existing front office area that is not being turned over for demo/construction until 4/6/26. That ductwork does not need to be installed by the 2/27/26 completion date however the ductwork shown below (circled in red) will need to be installed by the 2/27/26 completion date. HVAC contractor has the option to present a temporary ductwork condition if that's more feasible to review and have approved by the Owner's Representative once under contract.



12. New Library- The new library work to start 6/23/25.
 1. Abatement of the ceiling and flooring must be completed by 7/25/25. Remove existing sloped slab on grade and pour new concrete slab no later than 8/15/25. Construct new drywall partition at the stage opening no later than 8/22/25. All of the existing stage curtains, stage lighting, and other stage equipment must be demolished by 7/25/25. Existing ductwork feeding this area must be maintained throughout the entire school year 2025- 5/13/26 when the class moves out of the space. All work in the new library must be Substantially Complete by 2/27/26 including all the new bookshelves and furniture being provided by the GC. HVAC contractor needs to note that the main ductwork from RTU 4 comes down inside the existing stage area that is a classroom used for music that will still be occupied during the school year. Since the library HVAC work must be done by 2/27/26 the HVAC contractor must install this ductwork on off hours.
13. Existing gym will be turned over to start work effective Monday 5/18/26 and must be Substantially Complete by 8/21/26 with the rest of the project. Refer to phasing plans. Contractors can only access this area from the two sets of exterior doors. GC can use the existing asphalt as a laydown if needed for the masons to mix and store block. However, GC will need to fence in the area with 6 ft construction fencing if they want to use this space as laydown.

14. Interior classrooms shown to be done after the end of school 2026 will be emptied out by the District 6/18/26 through 6/26/26.
 1. The classroom items will be placed in the hallways, so it is critical that all of the new MEP infrastructure is done and stubbed into the classrooms during the school year and is completed by 6/1/26. As the rooms are finished during the summer of 2026 the District will move classroom items in the hallways back in to the rooms. The hallway ceilings will need to be installed 8/3/26 through 8/21/26.
15. HVAC contractor to remove existing 4 inch chilled water lines and replace them with the new 6 inch chilled water lines as shown on the plans between December 1, 2025 and February 27, 2026.
 1. Work outside and within the boiler room can be done during normal work hours. The pipe work for this upgrade to the 6 inch line within the school existing cafeteria and hallway must occur on off hours or during the holiday break in December 2025. New lines must be filled and ready for use if the chiller calls for cooling no later than Friday March 6, 2026.
16. In addition, work hours for work within the existing cafeteria area must occur on off hours between 5am and 10am and/or 3pm to 11pm Monday through Friday. When Contractors work in the mornings the 10am is a hard stop including having the space 100% clean/swept/vacuumed and all temporary plastic/protection removed.
17. Contractor can work in the building during normal hours from 12/23/25 through 1/1/26 as the school will be closed. Coordinate access with the Owner. Absolutely no contractor parking on site other than foremen's trucks in the laydown area provided.

1.8 CONTRACTOR'S CONSTRUCTION SCHEDULE, GENERAL

- A. The Work under the Contract Documents shall be planned, scheduled, executed, reported and accomplished using the Critical Path Method, in work days (excluding legal holidays). The provisions of the General Requirements and the directions of the Lead Contractor are to be followed by all Contractors in scheduling their construction activities. The scheduling services of the Lead Contractor are part of their Contract with the Owner, but nothing herein relieves the obligations of the other Prime Contractors to schedule their own construction activities and nothing herein alters the obligation of the Lead Contractor to resolve all supervision, coordination and scheduling issues between and among the Lead Contractor and other Prime Contractors.
- B. The primary objectives of the requirements of this Section are: (1) to insure adequate planning and execution of the Work by the Contractor by having a schedule of construction activities for all of the Prime Contractors and their subcontractors in initial form covering the first 120 days of construction within thirty (30) days of the Notice to Proceed and in final form within seventy-five (75) days of the Notice to Proceed; (2) to assist the Lead Contractor in evaluating progress of the Work; (3) to provide for optimum coordination by Contractors of their trades and subcontractors, and of their Work with the work or services provided by other Prime Contractors, all under the direction and supervision of the Lead Contractor; (4) to permit the timely prediction or detection of events or occurrences which may affect the timely prosecution of the Work; and (5) to provide a mechanism or tool for use by the Lead Contractor and other Prime Contractors in monitoring any actions of Contractors which may be required to comply

with the requirements of the Contract Documents relating to the completion of the various portions of the Work by the Completion Dates specified in the Contract Documents.

- C. Each Prime Contractor is responsible for determining the sequence and logic of activities, the time estimates of the detailed construction activities and the means, methods, techniques and procedures to be employed with regard to their portion of the Work. The Contractor's Construction Schedule shall represent the Contractor's best judgment of how they shall prosecute the Work in compliance with the requirements of the Contract Documents. Each Prime Contractor shall ensure that the Construction Schedule is current and accurate and is properly and timely monitored, updated and revised as Project conditions and the Contract Documents may require, and as may be directed by the Lead Contractor.
- D. Each Prime Contractor shall consult with their major subcontractors relating to the preparation of their construction plan and construction schedule. Major subcontractors shall receive copies of those portions of the Contractor's Construction Schedule which relate to their Work and shall be continually advised of any updates or revisions to the Contractor's construction schedule as the Work progresses. When the Contractor submits their construction schedule to the Lead Contractor or makes any proposed updates or revisions to such schedule, it shall be concluded by the Owner and Lead Contractor that the Contractor has consulted with and has the concurrence of their major subcontractors. Each Prime Contractor shall be solely responsible for ensuring that all subcontractors comply with the requirements of the Contractor's Construction Schedule for their portions of the Work.
- E. Each Prime Contractor shall provide the basic data as required by the Lead Contractor relating to activities, durations and sequences as part of the Contractor's draft of the Contractor's Construction Schedule. This data shall reflect the Contractor's actual construction plan for the Project, and shall fully comply with all requirements of the Contract Documents.
- F. The Lead Contractor shall provide, at no cost to the other Prime Contractor's, the drafting and computerization of the Contractor's data for the Contractor's Initial Construction Schedule, in accordance with the requirements of the Contract Documents. Each Contractor shall submit their data in a form or format acceptable to the Lead Contractor.
- G. To carry out the intent of this Section, each Prime Contractor agrees that the orientation session, as described in Subparagraph 1.9.B, the provision of drafting and computerization services by the Lead Contractor, and the reasonable exercise of any rights under this Section by the Lead Contractor, or Owner shall not be grounds for any claim against the Owner, the Lead Contractor or any representative of the Owner by the Contractor or any of their subcontractors or sub-subcontractors, alleging interference, lack of cooperation, delay, disruption, harassment, negligence or hindrance by the Owner or Lead Contractor, and the Contractor covenants not to sue therefore.
- H. It is understood and agreed that the Contractor's Construction Schedule is to represent the Contractor's best plan and estimate for the Work; however, the Contractor acknowledges that the Contractor's Construction Schedule may have to be revised from time-to-time as the Project proceeds. The Contractor further acknowledges and agrees that the Owner and Lead Contractor do not guarantee that: (1) The Contractor can start work activities on the "early start" or "late start" dates or complete work activities on the "early finish" or "late finish" dates shown in the schedule, or as same may be updated or revised; (2) The Contractor can proceed

at all times in the sequence established by the Contractor's Construction Schedule, or that the Contractor can rely upon the utilization of only the resources and manpower they initially plan for the performance of the Work; (3) The Contractor's Construction Schedule shall not have to be modified in order to obtain the agreement of any Prime Contractors to the schedule; or (4) The Contractor's Construction Schedule shall not have to be modified or changed by direction of the Lead Contractor. Any changes, modifications or adjustments made by the Contractor to the Contractor's Construction Schedule shall be in full compliance with all requirements of the Contract Documents.

- I. The Contractor acknowledges and agrees that their Construction Schedule must be flexible in order to accommodate and allow for their coordination with the construction activities of the other Prime Contractors.
- J. The review by the Lead Contractor of the Contractor's Construction Schedule or any other schedule or plan of construction of the Contractor, does not constitute an agreement by the Owner or Lead Contractor of any start or finish date in the schedule or specific durations or sequences for activities of the Contractor; further, nothing herein shall be construed as modifying or changing, or excusing the performance of the Contractor of required portions of the Work by the Completion Dates as set forth in the Contract Documents.
- K. The Completion Dates set forth in the Contract Documents represent only the major items of Work and may or may not include interface dates with the construction activities of the other Prime Contractors or others. Completion Dates are Contract requirements and are the essence to the Contract Documents and to the coordination of the Work by the Contractor. Completion Dates represent the latest allowable completion time for those portions of the Work to which each Completion Date relates. The Completion Dates are not intended to be a complete listing of all Work under the Contract Documents or of all interfaces with work performed by other Prime Contractors or others. The Contractor shall determine the time requirements for all such interfaces and shall be responsible for planning, scheduling and coordinating the Work in order to complete in accordance with those requirements.
- L. Should the Contractor intend or plan to complete the Work, or any portion thereof, earlier than any applicable Completion Date or the Contract Time, the Contractor shall give timely and reasonable Notice of this fact to the Lead Contractor. The Lead Contractor shall have the discretion to agree to or reject such early completion plan by the Contractor, subject to the rights of the Contractor as stated in these specifications. The Lead Contractor shall have no duty or obligation to agree to, or to cooperate with the Contractor regarding any early completion plan or proposal by the Contractor and shall not be liable for any damages of the Contractor because of the rejection by the Lead Contractor of said plan.
- M. Unless otherwise specifically provided in the Contract Documents, and in particular the General Requirements, the Contractor acknowledges that the Owner and Architect have contemplated in their planning and in any preliminary schedule that may have been prepared and made available to the Bidders, and in their budgeting for professional services, that the Work shall be performed on a 5-day work week basis, utilizing a single 8-hour shift per day. The Owner and Lead Contractor shall have the sole discretion of approving or rejecting a variance in the work week, number of shifts, or shift length. Unless otherwise agreed to by the Owner or Lead Contractor, the Contractor shall bear the cost of, and pay the Owner, for additional staff and

supervisory personnel and inspectors of any authority having jurisdiction of the Work, necessary to support any variance in the contemplated work week, number of shifts or shift length.

1.9 POST AWARD ACTIVITIES

- A. Upon receipt by the Contractor of the Notice to Proceed, and until the Contractor's Construction Schedule is completed by the Lead Contractor, Contractor and other Prime Contractors and completely and finally reviewed by the Lead Contractor, the Contractor shall do the following.
 - 1. Meet with the Lead Contractor and within thirty (30) days of the Notice to Proceed, complete an Initial Construction Schedule governing the first 120 days of construction.
 - 2. Meet with the Lead Contractor and within seventy-five (75) days of the Notice to Proceed, complete a Final Construction Schedule governing the Work.
- B. Orientation Session: The Contractor shall, upon the issuance of the Notice to Proceed by the Owner, attend an orientation session relating to the requirements pertaining to schedules and reports for the Project. This orientation session is designed to assist the Contractor in planning their Work and in developing their Construction Schedule. This session shall be held within ten (10) days after the date of the Notice to Proceed and shall be conducted by the Lead Contractor. The Contractor shall arrange for their superintendent(s), major subcontractors, and any scheduling consultants that they may employ, to attend the orientation session.
 - 1. It is understood and agreed that the Lead Contractor has no authority to waive any requirements of the Contract Documents at this orientation session, and all requirements of the Contract Documents remain applicable to the Contractor's Work whether or not discussed at this session.
 - 2. Should the Contractor or his major subcontractors fail or refuse to attend this orientation session, the Owner shall have the right to immediately terminate the Agreement with the Contractor for default and without liability or penalty to the Owner pursuant to the provisions of these specifications.

1.10 INITIAL CONSTRUCTION SCHEDULE

- A. Within ten (10) days following the orientation session, the Contractor, in consultation with the Lead Contractor, shall complete a draft of the Contractor's Construction Schedule.
- B. The Lead Contractor shall provide the Contractor with a draft print out of all activities needed during the first 120 days of construction for inclusion in the Initial Construction Schedule. The printouts shall be carefully reviewed by the Contractor. Any revisions, additions and/or deletions to these documents that are reasonably desired by the Contractor shall be brought to the attention of the Lead Contractor within five (5) days following receipt by the Contractor of such draft. The Lead Contractor shall, if consistent with the requirements of the Contract Documents, incorporate the Contractor's proposed revisions and shall thereafter deliver the completed Contractor's Construction Schedule and other reports to the Contractor and the other Prime Contractors.

- C. The Lead Contractor shall have the right to require any Prime Contractor to modify any Contractor data or any portion of the Contractor's Construction Schedule, or other schedules provided by the Contractor in compliance with the Contract Documents, with the Contractor bearing the expense thereof, and which the Lead Contractor reasonably determines to be: (1) impracticable; (2) based upon erroneous calculations or estimates; (3) unreasonable; (4) required in order to ensure proper coordination by the Contractor of the Work of others and with the Work or services being provided by others; (5) necessary to avoid undue interference with the construction activities of other Prime Contractors or those of any utility owners or adjoining property owners; (6) necessary to ensure completion of the Work by the Completion Dates set forth in the Contract Documents; (7) required in order for the Contractor to comply with the requirements of these specifications or any other requirements of the Contract Documents or (8) not in accordance with the Contractor's actual operations. The right of Lead Contractor to establish the final Contractor's Construction Schedule and to render final construction decisions on the content of the Contractor's Construction Schedule is subject to the right of the Contractor to proceed in accordance with the dispute resolution provisions of these specifications.

1.11 FINAL CONSTRUCTION SCHEDULE

- A. Within fourteen (14) days following completion of the Initial Construction Schedule, the Contractor, in consultation with the Lead Contractor, shall complete a draft of the Final Construction Schedule.
- B. The Lead Contractor shall provide the Contractor and Owner with a draft print out of all activities included in the Final Construction Schedule. The graphic representation and computer printouts shall be carefully reviewed by the Contractor. Any revisions, additions and/or deletions to these documents that are reasonably desired by the Contractor shall be brought to the attention of the Lead Contractor within five (5) days following receipt by the Contractor of such draft. The Lead Contractor shall, if consistent with the requirements of the Contract Documents, incorporate the Contractor's proposed revisions and shall thereafter deliver the completed Construction Schedule and other reports to the Owner, the Contractor and the other Prime Contractors.
- C. The Lead Contractor shall have the right to require any Prime Contractor to modify any Contractor data or any portion of the Contractor's Final Construction Schedule, or other schedules provided by the Contractor in compliance with the Contract Documents, with the Contractor bearing the expense thereof, and which the Lead Contractor reasonably determines to be: (1) impracticable; (2) based upon erroneous calculations or estimates; (3) unreasonable; (4) required in order to ensure proper coordination by the Contractor of the Work of others and with the Work or services being provided by others; (5) necessary to avoid undue interference with the construction activities of other Prime Contractors or those of any utility owners or adjoining property owners; (6) necessary to ensure completion of the Work by the Completion Dates set forth in the Contract Documents; (7) required in order for the Contractor to comply with the requirements of these specifications hereof or any other requirements of the Contract Documents or (8) not in accordance with the Contractor's actual operations.

1.12 CONSTRUCTION SCHEDULE CONTENT

- A. The Final Construction Schedule shall consist of a detailed CPM schedule of all Work activities of the Project. The schedule shall include, but not be limited to, the following information: (1) Project name; (2) completed Work ready for use by the next Contractor, the Owner, etc.; (3) activities relating to different areas of responsibility, such as subcontracted Work which is distinctly separate from that being done by the Contractor directly; (4) different categories of Work as distinguished by craft or crew requirements; (5) different categories of Work as distinguished by equipment requirements; (6) different categories of Work as distinguished by materials; (7) distinct and identifiable subdivisions of Work such as structural slabs, beams, columns; (8) location of Work within the Project that necessitates different times or crews to perform; (9) outage schedules for existing utility services that shall be interrupted during the performance of the Work; (10) acquisition and installation of equipment and materials supplied and/or installed by the Owner or Prime Contractors; (11) material to be stored on site; and (12) dates for completion of Work.
- B. For all major equipment and materials to be fabricated or supplied for the Project, the Contractor's Construction Schedule shall show a sequence of activities including: (1) preparation of Shop Drawings, Samples and all required Submissions as set forth in these specifications; (2) a reasonable time for review of Shop Drawings, Samples, and Submissions or such time as specified in the Contract Documents; (3) shop fabrication, delivery, and storage; (4) erection or installation; and (5) testing of equipment and materials.
- C. The Contractor's Construction Schedule shall clearly indicate the dates of the various stages of construction relative to temporary heat, as defined in Part 3 Paragraph "Temporary Heat" of Division 1 Section "Temporary Facilities & Controls".
- D. The Gantt Chart shall include the early dates and total float for each activity. There shall be no negative float in the baseline schedule.
- E. All activity durations shall be given in calendar days. No activity shall have a duration of more than twenty (20) days.
- F. Approval by the Contractor of the drafting and computerization of the Construction Schedule, and of schedule revisions, shall be evidence of the Contractor's agreement that the proposed schedule or schedule revision to the Construction Schedule is a true and accurate representation of their plan to complete the Work, including all change orders that are in the Contractor's possession as of the foregoing date, that the schedule or schedule revision fully complies with the requirements of the Contract Documents, that they shall prosecute the Work in accordance with this schedule revision, subject to any change therein which is implemented in accordance with the Contract Documents and that they have met and coordinated with and obtained the approval of said schedule revision by all other parties that are affected thereby.

1.13 UPDATING OF CONSTRUCTION SCHEDULE/PROGRESS REPORTS

- A. On a monthly basis the Contractor shall arrange for their Superintendent to meet at the site with the Lead Contractor to review the Contractor's report of actual progress. Said report shall set forth up-to-date and accurate progress data, shall be based upon the Contractor's best judgment and shall be prepared by the Contractor in consultation with all subcontractors.

- B. The progress report of the Contractor shall show the activities, or portions of activities, completed during the reporting period, the actual start and finish dates for these activities, remaining durations and/or estimated dates for completion of Work for activities currently in progress.
- C. The Lead Contractor shall produce a computerized update work sheet for the Contractor to complete as a part of this process.
- D. The Contractor shall submit a written report with the updated progress analysis which shall include, but not be limited to, a description of problem areas, current and anticipated delaying factors and their impact, explanations of corrective actions taken or planned, any newly planned activities or changes in sequence, and proposed logic for a recovery schedule, if required, as further described herein. The report shall also include: (1) a narrative describing actual Work accomplished during the reporting period; (2) a list of major construction equipment used on the Project during the reporting period and any construction equipment idle during the reporting period; (3) the total number of personnel by craft actually engaged in the Work during the reporting period, with such total stated separately as to office, supervisory, and field personnel; (4) a manpower and equipment forecast for the succeeding thirty (30) days, stating such total as to office, supervisory and field personnel; (5) a list of Contractor-supplied materials and equipment, indicating current availability and anticipated job Site delivery dates; and (6) changes or additions to the Contractor's supervisory personnel, if any, since the preceding progress report.
- E. The Contractor understands and agrees that the submission and approval of progress updates and the receipt of progress reports are an integral part and basic element of the Applications for Payment; and that the Contractor shall not be entitled to any progress payment under the Contract Documents until, in the sole discretion of the Owner, the Contractor has fully complied with the requirements of this Section.
- F. The Contractor shall be solely responsible for expediting the delivery of all materials and equipment to be furnished by or to them so that the progress of construction shall be maintained according to the currently approved Construction Schedule for the Work. The Contractor shall notify the Lead Contractor in writing, and in a timely and reasonable manner, whenever the Contractor determines or anticipates that the delivery date of any material or equipment to be furnished by the Contractor shall be later than the delivery date indicated by the Construction Schedule, or required consistent with the completion requirements of the Contract Documents, subject to schedule updates as herein provided.
- G. The Contractor shall ensure that off the site activities do not control the critical path of the Construction Schedule and instead, that the critical path relates to activities on the site.

1.14 RECOVERY SCHEDULE

- A. Should the updated Contractor's Construction Schedule, at any time during the Contractor's performance, show, in the sole opinion of the Owner that the Contractor is fourteen (14) or more days behind schedule for any Completion Date, or should the Contractor be required to undertake actions as provided for in these specifications, with or without the direction of the Lead Contractor, the Contractor shall prepare a recovery schedule at no additional cost to the

Owner (unless the Owner is solely responsible for the event or occurrence which has caused the schedule slippage) explaining and displaying how the Contractor intends to reschedule their Work in order to regain compliance with the Contractor's Construction Schedule during the immediate subsequent pay period.

- B. If the Contractor believes that all of the time can be recovered during the subsequent pay period, the Contractor shall be permitted to prepare a recovery schedule as set forth below. However, if the Contractor believes it shall take more than thirty (30) days to recover all of the lost time, they shall prepare and submit a request for revision to the Contractor's Construction Schedule and comply with all of the requirements of a schedule revision as set forth in this Paragraph 1.14 and Paragraph 1.15.
1. The Contractor shall prepare and submit to the Lead Contractor a limited duration recovery schedule, incorporating the best available information from subcontractors and others which shall permit a return to the Contractor's Construction Schedule at the earliest possible time. The Contractor shall prepare a recovery schedule to the same level of detail as the Contractor's Construction Schedule for a maximum duration of one month. The recovery schedule shall be prepared in coordination with all other Prime Contractors.
 2. Within two (2) days after submission by the Contractor or by any Prime Contractor of a recovery schedule to the Lead Contractor, the Contractor shall participate in a conference with the Lead Contractor and the Owner, to review and evaluate the recovery schedule. Within two (2) days of the conference, the Contractor shall submit the revisions necessitated by the review for the Owner's review and approval. The Contractor shall use the approved recovery schedule as their plan for returning to the Contractor's Construction Schedule.
 3. The Contractor shall confer continuously with the Lead Contractor and Owner to assess the effectiveness of the recovery schedule. As a result of this conference:
 - a. If the Owner determines the Contractor is still behind schedule, the Lead Contractor shall direct the Contractor to prepare a schedule revision with the assistance of the Lead Contractor and comply with all of the requirements of a schedule revision as stated herein and the other requirements of the Contract Documents; provided, however, that nothing herein shall limit in any way the rights and remedies of the Owner and the Lead Contractor as provided elsewhere in the Contract Documents; or
 - b. If the Owner determines the Contractor has successfully complied with provisions of the recovery schedule, the Lead Contractor shall direct the Contractor to return to the use of the approved Contractor's Construction Schedule.
 - c. Nothing herein alters the rights of the Owner to resolve coordination and scheduling issues in dispute between and among the Contractor and other Prime Contractors.

1.15 SCHEDULE REVISIONS

- A. Should the Contractor desire to or be otherwise required under the Contract Documents to make modifications or changes in their method of operation, their sequence of Work or the durations of the activities in the Contractor's Construction Schedule, they shall do so in accordance with the requirements of this Paragraph and the Contract Documents. Revisions to

the approved Contractor's Construction Schedule must be presented to and reviewed by the Owner.

- B. The Contractor shall submit requests for revisions to the Contractor's Construction Schedule to the Owner, together with written rationale for revisions and a description of logic for rescheduling Work and maintaining the Completion Dates listed in the Contract Documents. Proposed revisions acceptable shall be incorporated into the next update of the Contractor's Construction Schedule. The Contractor shall pay the Owner for costs incurred by the Lead Contractor for the revisions.
- C. In all instances where a revision to the Contractor's Construction Schedule will affect the construction activities of other Prime Contractors, prior to submission by the Contractor of their proposed schedule revisions, they shall meet with and gain written approval of each of the Prime Contractors to make the revisions which shall be evidenced by the signatures of said Prime Contractors on the proposed schedule revisions. If accepted, the revisions, shall be binding upon the Contractor and all Prime Contractors on the Project.

1.16 FLOAT TIME

- A. Float or slack time associated with one chain of activities is defined as the amount of time between the earliest start date and latest start date or between the earliest finish date and latest finish date for such activities, as calculated as part of the Contractor's Construction Schedule. The Contractor agrees that there shall be no basis for any modification of the Completion Date or dates or an extension of the Contract Time, or a claim for additional compensation as a result of any Project problem, Change Order or delay which only results in the loss of available positive float on the Contractor's Construction Schedule.

1.17 SCHEDULE OF INSPECTIONS AND TESTS

- A. Prepare a schedule of inspections, tests, and similar services required by the Contract Documents. Submit the schedule within 10 days of the date established for commencement of the Work.
- B. The schedule shall be in tabular form and shall include, but not be limited to, the following:
 - 1. Specification Section number
 - 2. Description of the test
 - 3. Identification of applicable standards
 - 4. Identification of test methods
 - 5. Number of tests required
 - 6. Time schedule or time span for tests
 - 7. Entity responsible for performing tests
 - 8. Requirements for taking samples
 - 9. Unique characteristics of each service
- C. Distribute the schedule to the Owner, Architect, and each party involved in performance of portions of the Work where inspections and tests are required.

1.18 REPORTS

- A. Daily Construction Reports: Prepare Daily Construction Reports recording the following information concerning events at the Project site:
1. List of subcontractors at Project site
 2. List of separate contractors at Project site
 3. Approximate count of personnel at Project site
 4. High and low temperatures and general weather conditions
 5. Accidents
 6. Meetings and significant decisions
 7. Unusual events (refer to special reports)
 8. Stoppages, delays, shortages, and losses
 9. Meter readings and similar recordings
 10. Emergency procedures
 11. Orders and requests of authorities having jurisdiction
 12. Change Orders received and implemented
 13. Construction Change Directives received
 14. Services connected and disconnected
 15. Equipment or system tests and startups
 16. Partial Completions and occupancies
 17. Substantial Completions authorized
- B. Field Correction Reports: When the need to take corrective action that requires a departure from the Contract Documents arises, prepare a detailed report. Include a statement describing the problem and recommended changes. Indicate reasons the Contract Documents cannot be followed. Submit a copy to the Architect immediately.
- C. Field Condition Reports: Immediately on discovery of a difference between field conditions and the Contract Documents, prepare a detailed report. Submit with a Request for Information. Include a detailed description of the differing conditions, together with recommendations for changing the Contract Documents.
- D. Material Location Reports: At weekly intervals, prepare a comprehensive list of materials delivered to and stored at the site. The list shall be cumulative, showing materials previously reported plus items recently delivered. Include with the list a statement of progress on and delivery dates for materials or items of equipment fabricated or stored away from the site. Submit copies of the list to the Architect at weekly intervals.

1.19 SPECIAL REPORTS

- A. General: Submit Special Reports directly to the Owner within one day of an occurrence. Distribute copies of reports to parties affected by the occurrence and to the Architect.
- B. Reporting Unusual Events: When an event of an unusual and significant nature occurs at the Project site, whether or not related directly to the Work, prepare and submit a Special Report. List chain of events, persons participating, response by Contractor's personnel, evaluation of

results or effects, and similar pertinent information. Advise the Owner in advance when these events are known or predictable.

PART 2 - EXECUTION (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

END OF SECTION 013200

SECTION 013300 - SUBMITTALS

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for Submittals required for performance of the Work, including the following:
 - 1. Shop Drawings.
 - 2. Product Data.
 - 3. Samples.
 - 4. Quality Assurance Submittals.
 - 5. Submittals Schedule.
- B. Administrative Submittals: Refer to other Division 1 Sections and other Contract Documents for requirements for administrative submittals. Such submittals include, but are not limited to, the following:
 - 1. Permits.
 - 2. Applications for Payment, along with Initial Statement of Contract Value.
 - 3. Performance and Payment Bonds.
 - 4. Insurance certificates.
 - 5. List of subcontractors.
- C. Related Sections: The following Sections contain requirements that relate to this Section:
 - 1. Division 1 Section "Applications for Payment" specifies requirements for submittal of the Schedule of Values.
 - 2. Division 1 Section "Substitutions" specifies procedural requirements for handling requests for substitutions made after award of the Contract.
 - 3. Division 1 Section "Project Coordination" specifies requirements governing preparation and submittal of required Coordination Drawings.
 - 4. Division 1 Section "Project Meetings" specifies requirements for submittal and distribution of meeting and conference minutes.
 - 5. Division 1 Section "Construction Progress Documentation" specifies requirements for Submittal Schedules.
 - 6. Division 1 Section "Quality Requirements" specifies requirements for submittal of inspection and test reports.
 - 7. Division 1 Section "Warranties" specifies requirements for Submittal of warranties at project closeout.

8. Division 1 Section "Project Record Documents" specifies requirements for submittal of Project Record Documents at project closeout.

1.3 DEFINITIONS

- A. Coordination Drawings show the relationship and integration of different construction elements that require careful coordination during fabrication or installation to fit in the space provided or to function as intended.
 1. Preparation of Coordination Drawings is specified in Division 1 Section "Project Coordination" and may include components previously shown in detail on Submittals.
- B. Field samples are full-size physical examples erected on-site to illustrate finishes, coatings, or finish materials. Field samples are used to establish the standard by which work will be judged.
- C. Mockups are full-size assemblies for review of construction, coordination, testing, or operation; they are not Samples.
- D. For Specification sections listing manufacturer's products that include the phrases "but are not limited to the following" or "approved equal", Contractor shall be responsible to provide certification that the submitted product complies with the specified product. Include this certification with the Submittal. Final approval of a product submitted as an "equal" shall be solely by Architect.

1.4 SUBMITTAL PROCEDURES

- A. **All Submittals shall be processed electronically through a web-based construction administration software, either Newforma or Submittal Exchange, to be determined by Architect.** This software serves as a collaborative web environment which expedites and organizes the review process. Owner will pay the fees associated to acquire the use of a license for Project. **Each Submittal is to include a SINGLE item or element of construction only. A Submittal Cover Sheet, on the attached form shall be completed, signed and certified by Contractor for EACH Submittal. Architect will not accept Submittals including multiple items or elements of construction. Submittals not meeting this procedure requirement may be returned with No Action Taken. No extension of Contract Time will be authorized due to failure to comply with this procedure.**
 1. The software licensee will provide a training session via web conference for the construction team.
 2. All Samples and color selections shall be delivered by mail or courier. Samples shall be logged in via the construction administration software, but delivered hardcopy by mail.
 3. The design and construction team shall collectively maintain the Submittal Log through the construction administration software.
- B. Coordination: 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.

1. Coordinate each Submittal with fabrication, purchasing, testing, delivery, other Submittals and related activities that require sequential activity.
 2. Coordinate transmittal of different types of Submittals for related elements of work so processing will not be delayed by the need to review Submittals concurrently for coordination.
 - a. Architect reserves the right to withhold action on a Submittal requiring coordination with other Submittals until all related Submittals are received.
 - b. **Be advised that all interior finishes will be reviewed together and finally determined after receipt of all Shop Drawings, Product Data and Samples which pertain to the interior finish color selections and related equipment.**
 3. To avoid the need to delay installation as a result of the time required to process Submittals, allow sufficient time for Submittal review, including time for resubmittals.
 - a. Allow a minimum of fifteen (15) working days for review. Additional time may be required for further review and/or coordination with consultants and subsequent Submittals as determined by Architect.
 - b. If a resubmittal is necessary, process the same as the original Submittal.
 - c. No extension of Contract Time will be authorized because of failure to transmit Submittals to Architect sufficiently in advance of the work to permit processing.
- C. Submittal Preparation: Architect will not accept Submittals received without the attached 'Submittal Cover Sheet'. Contractor shall stamp the 'Submittal Cover Sheet' with an action stamp. Contractor shall mark the stamp appropriately to indicate the action taken. **Submittals shall be pre-reviewed by Contractor PRIOR to submittal to Architect for review.** See Paragraph 1.6.C.1 of this Section for additional information.
1. Use the 'Submittal Cover Sheet' attached at the end of this Section for all Submittals.
 2. Complete all information required on the 'Submittal Cover Sheet'. Failure to do so may result in return of the Submittal with No Action Taken. No extension of Contract Time will be authorized because of failure to comply with this procedure.
- D. Contractor's Transmittal: Architect will not accept Submittals received from sources other than Contractor.

1.5 SUBMITTAL SCHEDULE

- A. Submittal Schedule: Submit three copies of the Submittal Schedule to Architect. Arrange the following information in a tabular format:
1. Scheduled date for first Submittal.
 2. Specification Section number and title.
 3. Submittal category (action or informational).
 4. Name of Subcontractor.
 5. Description of the work covered.
 6. Scheduled date for final release or approval.

- B. Submit the Submittal Schedule, arranged in chronological order by dates required by Contractor's Construction Schedule. Include time required for review, resubmittal, ordering, manufacturing, fabrication and delivery when establishing dates.
1. Coordinate the Submittal Schedule with the List of Subcontractors, the Schedule of Values and Contractor's Construction Schedule.
 2. Initial Submittal: Submit an Initial Submittal Schedule concurrently with the Initial Construction Schedule. Include Submittals required during the first 60 days of construction. List those required to maintain orderly progress of the Work and those required early because of long lead time for manufacture, fabrication or delivery.
 3. Final Submittal: Submit a Final Submittal Schedule concurrently with the Final Contractor's Construction Schedule. Include all remaining Submittals. **All Submittals are required to be submitted by Contractor within ninety (90) days of the date of Notice to Proceed.**
- C. Distribution: Following response to the initial Submittal, print and distribute copies to Architect, Owner, subcontractors, and other parties required to comply with submittal dates indicated. Post copies in Project meeting room and field office.
1. When revisions are made, distribute to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in construction activities.
- D. Schedule Updating: Revise the schedule after each meeting or activity where revisions have been recognized or made. Issue the updated schedule concurrently with the report of each meeting.

1.6 SUBMITTALS

- A. Shop Drawings:
1. Submit newly prepared information drawn accurately and to scale. Highlight, circle or otherwise indicate deviations from the Contract Documents. Do not reproduce Contract Documents or copy standard information as the basis of Shop Drawings. Standard information prepared without specific reference to Project is not a Shop Drawing.
 2. Shop Drawings include fabrication and installation drawings, setting diagrams, schedules, patterns, templates and similar drawings. Include the following information:
 - a. Dimensions.
 - b. Identification of products and materials included by sheet and detail number.
 - c. Notation of dimensions established by field measurement.
 - d. Submit Shop Drawings electronically through the construction administration software for Architect's review.
 - e. Architect will return Submittals electronically and indicate action taken.
 - f. Maintain a complete set of Shop Drawings on Project site during construction.
 - g. Maintain a set of marked up Shop Drawings as part of Project record documents to be turned over to Owner at Contract Closeout.

- h. Do not use Shop Drawings without an appropriate final stamp indicating action taken.

B. Product data

1. Collect and assemble Product Data into a single Submittal for each element or system of construction. Product Data includes printed information such as manufacturer's installation instructions, catalog cuts, standard color charts, roughing-in diagrams and templates, standard wiring diagrams and performance curves.
2. Mark each copy to show applicable choices and options. Where printed Product Data includes information on product options that are not required or are not being used, mark Product Data to indicate the applicable products and information. Include the following information:
 - a. Manufacturer's printed recommendations.
 - b. Compliance with trade association standards.
 - c. Compliance with recognized testing agency standards.
 - d. Application of testing agency labels and seals.
 - e. Notation of dimensions verified by field measurement.
 - f. Notation of coordination requirements.
 - g. Submit Product Data electronically through the construction administration software for Architect's review.
 - h. Architect will return Product Data electronically and indicate action taken.
 - i. Maintain a complete set of Product Data on site during construction.
 - j. Maintain a set of marked up Product Data as part of Project record documents to be turned over to Owner at Contract Closeout.
 - k. Do not use Product Data without an appropriate final stamp indicating action taken.

- C. Action Stamp: **Contractor shall thoroughly review and stamp Submittals** with their action stamp. Contractor shall mark the stamp appropriately to indicate the action taken.
Submittals not prereviewed by Contractor will be returned with no action taken.

1. Contractor's review notations and action stamp shall be applied with **GREEN** ink.

- D. Distribution: Furnish final approved Submittals to installers, subcontractors, suppliers, manufacturers, fabricators, and all others required for performance of construction activities.

1.7 SAMPLES

- A. Where required by individual specification sections, submit full-size, fully fabricated Samples cured and finished as specified and physically identical to the material or product proposed. Samples include partial sections of manufactured or fabricated components, cuts or containers of materials, physical material samples, color range sets or swatches showing color, texture, and pattern.

1. Mount or display Samples in a manner to facilitate review of qualities indicated. Prepare Samples to match Architect's sample or in accordance with the product specifications. Include the following:
 - a. Specification Section number and reference.
 - b. Generic description of the Sample.
 - c. Sample source.
 - d. Product name or name of the manufacturer.
 - e. Compliance with recognized standards.
 - f. Availability and delivery time.
2. Submit Samples for review of size, kind, color, pattern and texture. Submit Samples for a final check of these characteristics with other elements and a comparison of these characteristics between the final Submittal and the actual component as delivered and installed.
 - a. Where variation in color, pattern, texture or other characteristic is inherent in the material or product represented, submit at least 3 multiple units that show approximate limits of the variations.
 - b. Refer to other Specification Sections for requirements for Samples that illustrate workmanship, fabrication techniques, details of assembly, connections, operation, and similar construction characteristics.
 - c. Samples not incorporated into the Work, or otherwise designated as Owner's property, are the property of Contractor and shall be removed from Project site prior to Substantial Completion.
3. Submit a full set of choices where Samples are submitted for selection of color, pattern, texture or similar characteristics from a range of choices as specified.
4. Architect will review and return preliminary Submittals with Architect's notation, indicating selection and other action.

1.8 QUALITY ASSURANCE SUBMITTALS

- A. Submit Quality Control Submittals, including design data, certifications, manufacturer's instructions, manufacturer's field reports and other quality control submittals as required under other Sections of the Specifications.
- B. Certifications: Where other Sections of the Specifications require certification that a product, material or installation complies with specified requirements, submit a certification from the manufacturer certifying compliance with the specified requirements. Architect reserves the right to require this certification to be notarized.
 1. The Certification shall be signed by an officer of the manufacturer or other individual authorized to sign documents on behalf of the company.
- C. Inspection and Test Reports: Requirements for submittal of inspection and test reports from independent testing agencies are specified in Division 1 Section "Quality Requirements."

1.9 ARCHITECT'S ACTION

- A. Except for Submittals for the record or information, where action and return is required, Architect will review each Submittal, mark to indicate action taken, and return promptly.
 - 1. Compliance with specified characteristics is Contractor's responsibility.
- B. Action Stamp: Architect will stamp each Submittal with a uniform action stamp. Architect's review notations and action stamp shall be applied with **RED** ink. Architect will mark the stamp to indicate the action taken, as follows:
 - 1. NO EXCEPTION TAKEN: Work covered by the Submittal may proceed without further submittal, provided it complies with requirements of the Contract Documents. Final payment depends on that compliance.
 - 2. EXCEPTION(S) NOTED: Work covered by the Submittal may proceed provided it complies with notations or corrections on the Submittal and requirements of the Contract Documents. Final payment depends on that compliance.
 - 3. SUBMIT SPECIFIED ITEM: Do not proceed with work covered by the Submittal, including purchasing, fabrication, delivery or other activity. Prepare a new Submittal indicating specified material; resubmit without delay.
 - 4. REVISE & RESUBMIT: Do not proceed with work covered by the Submittal, including purchasing, fabrication, delivery or other activity. Revise or prepare a new Submittal according to the notations; resubmit without delay. Repeat if necessary to obtain different action mark.
 - 5. REJECTED: Do not proceed with work covered by the Submittal, including purchasing, fabrication, delivery or other activity. Do not resubmit a revised copy; prepare a new Submittal according to the notations; resubmit without delay. Repeat if necessary to obtain different action mark.
- C. Unsolicited Submittals: Architect will take no action on unsolicited submittals.

END OF SECTION 013300

SUBMITTAL COVER SHEET
(Attach to each copy of each submittal)

PROJECT NAME & NUMBER

Additions & Renovations to Coopertown Elementary School

ARCHITECT:



Crabtree, Rohrbaugh & Associates - Architects

401 East Winding Hill Road

Mechanicsburg, PA 17055

Pennsylvania • Maryland • Virginia • West Virginia

ENGINEER:

CONTRACTOR:

SUBCONTRACTOR/SUPPLIER:

MANUFACTURER:

ITEM SUBMITTED:

SUBMITTAL NO.

SPECIFICATION SECTION NO.

PARAGRAPH NO.

DRAWING REFERENCE

DETAIL NO.

CERTIFICATION: (Circle One)

A. Certified to comply with Drawings and Specifications.

B. Certified to comply with Drawings and Specifications except as noted on Contractor attachment(s)

Signature: Subcontractor/Supplier

Date

Signature: Contractor

Date

Contractor's Action Stamp Here

Architect's Action Stamp Here

SUBMITTAL DEVIATION SHEET
(Attach this sheet behind Submittal Cover Sheet)

Additions & Renovations to Coopertown Elementary School

PROJECT NAME AND NUMBER:

ARCHITECT:



Crabtree, Rohrbaugh & Associates - Architects

401 East Winding Hill Road

Mechanicsburg, PA 17055

Pennsylvania • Maryland • Virginia • West Virginia

ENGINEER:

CONTRACTOR:

SUBCONTRACTOR/SUPPLIER:

PRODUCT SPECIFIED:

SPECIFICATION SECTION NO.

PARAGRAPH NO.

DRAWING REFERENCE

DETAIL NO.

DESCRIPTION OF DEVIATION:

Signature: Subcontractor/Supplier

Date

Signature: Contractor

Date

ARCHITECT/ENGINEER REMARKS:

SECTION 014000 - QUALITY REQUIREMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for quality assurance and quality control.
- B. Testing and inspecting services are required to verify compliance with requirements specified or indicated. These services do not relieve Contractor of responsibility for compliance with the requirements of the Contract Document.
 - 1. Specific quality-control requirements for individual construction activities are specified in the Sections that specify those activities. Requirements in those Sections may also cover production of standard products.
 - 2. Specified tests, inspections, and related actions do not limit Contractor's quality-control procedures that facilitate compliance with the requirements of the Contract Document.
 - 3. Requirements for Contractor to provide quality-control services required by Architect, Owner or authorities having jurisdiction are not limited by the provisions of this Section.
- C. Related Sections: The following Sections contain requirements that relate to this Section:
 - 1. Division 1 Section "Construction Progress Documentation" for developing a schedule of required tests and inspections.
 - 2. Division 1 Section "Cutting and Patching" for repair and restoration of construction disturbed by testing and inspecting activities.
 - 3. Divisions 2 through 33 Sections for specific test and inspection requirements.

1.3 DEFINITIONS

- A. Quality-Assurance Services: Activities, actions and procedures performed before and during execution of the Work to guard against defects and deficiencies and to ensure that proposed construction complies with Project requirements.
- B. Quality-Control Services: Tests, inspections, procedures and related actions during and after execution of the Work to evaluate that completed construction complies with Project requirements. Services do not include contract enforcement activities performed by Architect.

- C. Mockups: Full-size, physical example assemblies to illustrate finishes and materials. Mockups are used to verify selections made under Sample submittals to demonstrate aesthetic effects and, where indicated, qualities of materials and execution, and to review construction, coordination, testing, or operation. Samples are not mockups.
- D. Testing Agency: An entity engaged to perform specific tests, inspections, or both. Testing laboratory shall mean the same as testing agency.

1.4 DELEGATED DESIGN

- A. Performance and Design Criteria: Where professional design services or certifications by a design professional are specifically required of Contractor by the Contract Documents, provide products and systems complying with the specific performance and design criteria indicated.
 - 1. If the criteria indicated is not sufficient to perform the services or certifications required, submit a written request for additional information to Architect.

1.5 REGULATORY REQUIREMENTS

- A. Copies of Regulations: Obtain copies of applicable regulations and retain at Project site to be available for reference by parties who have a reasonable need.

1.6 SUBMITTALS

- A. Qualification Data: For testing agencies specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include proof of qualifications in the form of a recent report on the inspection of the testing agency by a recognized authority.
- B. Delegated-Design Submittal: In addition to Shop Drawings, Product Data and other required submittals, submit a statement, signed and sealed by the responsible design professional, for each product and system specifically assigned to Contractor to be designed or certified by a design professional, indicating that the products and systems are in compliance with the performance and design criteria indicated. Include a list of codes, loads and other factors used in performing these services.
- C. Schedule of Tests and Inspections: Prepare in tabular form and include the following:
 - 1. Specification Section number and title.
 - 2. Description of test and inspection.
 - 3. Identification of applicable standards.
 - 4. Identification of test and inspection methods.
 - 5. Number of tests and inspections required.
 - 6. Time schedule or time span for tests and inspections.
 - 7. Entity responsible for performing tests and inspections.
 - 8. Requirements for obtaining samples.
 - 9. Unique characteristics of each quality-control service.

- D. Reports: Prepare and submit certified written reports that include the following:
1. Date of issue.
 2. Project title and number.
 3. Name, address, and telephone number of testing agency.
 4. Dates and locations of samples and tests or inspections.
 5. Names of individuals making tests and inspections.
 6. Description of the Work and test and inspection method.
 7. Identification of product and Specification Section.
 8. Complete test or inspection data.
 9. Test and inspection results and an interpretation of test results.
 10. Ambient conditions at the time of sample taking and testing and inspecting.
 11. Comments or professional opinion on whether tested or inspected work complies with the requirements of the Contract Documents.
 12. Name and signature of laboratory inspector.
 13. Recommendations on retesting and re-inspecting.
- E. Permits, Licenses, and Certificates: For Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records and similar documents, established for compliance with standards and regulations bearing on performance of the Work.

1.7 QUALITY ASSURANCE

- A. Fabricator Qualifications: A firm experienced in producing products similar to those indicated for Project, and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- B. Factory-Authorized Service Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to inspect the installation of manufacturer's products that are similar in material, design, and extent to those indicated for Project.
- C. Installer Qualifications: A firm or individual experienced in installing, erecting, or assembling work similar in material, design and extent to that indicated for Project, whose work has resulted in construction with a record of successful in-service performance.
- D. Manufacturer Qualifications: A firm experienced in manufacturing products or systems similar to those indicated for Project and with a record of successful in-service performance.
- E. Professional Engineer Qualifications: A professional engineer who is qualified and legally licensed to practice in the jurisdiction where Project is located and who is experienced in providing engineering services of the kind indicated. Engineering services are defined as those performed for installations of the system, assembly or product that are similar to those indicated for Project in material, design and extent.
- F. Specialists: Certain sections of the Specifications require that specific construction activities shall be performed by entities who are recognized experts in those operations. Specialists

shall satisfy the qualification requirements indicated and shall be engaged for the activities indicated.

1. The requirement for specialists shall not supersede building codes and similar regulations governing the Work, nor interfere with local trade-union jurisdictional settlements and similar conventions.
- G. Testing Agency Qualifications: An agency with the experience and capability to conduct the testing and inspecting indicated, as documented by ASTM E548, and that specializes in the types of tests and inspections to be performed.
- H. Preconstruction Testing: A qualified testing agency shall perform preconstruction testing for compliance with specified requirements for performance and test methods.
1. Contractor responsibilities include the following:
 - a. Provide test specimens and assemblies representative of proposed materials and construction. Provide sizes and configurations of assemblies to adequately demonstrate capability of the product to comply with performance requirements.
 - b. Submit specimens in a timely manner with sufficient time for testing and analyzing results to prevent delaying the Work.
 - c. Fabricate and install test assemblies using installers who will perform the same tasks for Project.
 - d. When testing is complete, remove assemblies; do not reuse materials on Project.
 2. Testing Agency Responsibilities: Submit a certified written report of each test, inspection, and similar quality-assurance service to Architect, with copy to Contractor. Interpret tests and inspections and state in each report whether the tested and inspected work complies with or deviates from the requirements of the Contract Documents.
- I. Mockups: Before installing portions of the Work requiring mockups, build mockups for each form of construction and finish required to comply with the following requirements, using materials indicated for the completed Work:
1. Build mockups in the location and of the size indicated or, if not indicated, as directed by Architect.
 2. Notify Architect at least seven days in advance of dates and times when mockups will be constructed.
 3. Demonstrate the proposed range of aesthetic effects and workmanship.
 4. Obtain Architect's approval of mockups before starting work, fabrication, or construction.
 5. Maintain mockups during construction in an undisturbed condition as a standard for judging the completed Work.
 6. Demolish and remove mockups when directed, unless otherwise indicated.

1.8 QUALITY CONTROL

- A. Owner Responsibilities: Where quality-control services are indicated as Owner's responsibility, Owner will engage a qualified testing agency to perform these services.
 - 1. Owner will furnish Contractor with the names, addresses and telephone numbers of the testing agencies engaged and a description of the types of testing and inspecting each is engaged to perform.
 - 2. The Costs for retesting and reinspecting construction that replaces or is necessitated by work that failed to comply with the requirements of the Contract Documents will be charged to Contractor.
- B. Contractor Responsibilities: Unless otherwise indicated, provide quality-control services specified and required by authorities having jurisdiction.
 - 1. Where services are indicated as Contractor's responsibility, engage a qualified testing agency to perform these quality-control services.
 - a. Contractor shall not employ the same entity engaged by Owner, unless agreed to in writing by Owner.
 - 2. Notify testing agencies at least 24 hours in advance of the time when work that requires testing or inspecting will be performed.
 - 3. Where quality-control services are indicated as Contractor's responsibility, submit a certified written report, in duplicate, of each quality-control service.
 - 4. Testing and inspecting requested by Contractor, which are not required by the Contract Documents, are Contractor's responsibility.
 - 5. Submit additional copies of each written report directly to authorities having jurisdiction, when they so direct.
- C. Special Tests and Inspections: Owner will engage a testing agency to conduct special tests and inspections required by authorities having jurisdiction as the responsibility of Owner.
 - 1. Testing agency will notify Architect and Contractor promptly of irregularities and deficiencies observed in the Work during performance of its services.
 - 2. Testing agency will submit a certified written report of each test, inspection and similar quality-control service to Architect, with copy to Contractor and to authorities having jurisdiction.
 - 3. Testing agency will submit a final report of special tests and inspections at Substantial Completion, which includes a list of unresolved deficiencies.
 - 4. Testing agency will interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from the requirements of the Contract Documents.
 - 5. Testing agency will retest and reinspect corrected work. Costs for retesting and reinspecting construction that replaces or is necessitated by work that failed to comply with the requirements of the Contract Documents will be charged to Contractor.

- D. Manufacturer's Field Services: Where indicated, engage a factory-authorized service representative to inspect field-assembled components and equipment installation, including service connections. Report results in writing.
- E. Retesting/Reinspecting: Regardless of whether original tests or inspections were Contractor's responsibility, provide quality-control services, including retesting and reinspecting, for construction that revised or replaced work that failed to comply with the requirements established by the Contract Documents.
- F. Testing Agency Responsibilities: Cooperate with Architect and Contractor in performance of duties. Provide qualified personnel to perform required tests and inspections.
 - 1. Notify Architect and Contractor promptly of irregularities or deficiencies observed in the Work during performance of its services.
 - 2. Interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from requirements.
 - 3. Submit a certified written report, in duplicate, of each test, inspection and similar quality-control service through Contractor.
 - 4. Do not release, revoke, alter or increase the requirements of the Contract Documents or approve or accept any portion of the Work.
 - 5. Do not perform any duties of Contractor.
- G. Associated Services: Cooperate with agencies performing required tests, inspections, and similar quality-control services, and provide reasonable auxiliary services as requested. Notify the agency sufficiently in advance of operations to permit assignment of personnel. Provide the following:
 - 1. Access to the Work.
 - 2. Incidental labor and facilities necessary to facilitate tests and inspections.
 - 3. Adequate quantities of representative samples of materials that require testing and inspecting. Assist agency in obtaining samples.
 - 4. Facilities for storage and field-curing of test samples.
 - 5. Delivery of samples to testing agencies.
 - 6. Preliminary design mix proposed for use for material mixes that require control by the testing agency.
 - 7. Security and protection for samples and for testing and inspecting equipment at Project site.
- H. Coordination: Coordinate the sequence of activities to accommodate required quality-assurance and quality-control services with a minimum of delay and to avoid the necessity of removing and replacing construction to accommodate testing and inspecting.
 - 1. Schedule times for tests, inspections, obtaining samples, and similar activities
- I. Schedule of Tests and Inspections: Prepare a schedule of tests, inspections, and similar quality-control services required by the Contract Documents. Submit the schedule within 30-days of the date established for the Notice to Proceed.

1. Distribution: Distribute the schedule to Owner, Architect, the testing agencies and each party involved in performance of portions of the Work where tests and inspections are required.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

3.1 REPAIR AND PROTECTION

- A. General: On completion of testing, inspecting, sample taking and similar services, repair damaged construction and restore substrates and finishes.
 1. Provide materials and comply with the installation requirements specified in other Sections of these Specifications. Restore patched areas and extend restoration into adjoining areas in a manner that eliminates evidence of patching.
 2. Comply with the Contract Document requirements for Division 1 Section "Cutting and Patching."
- B. Protect construction exposed by or for quality-control service activities.
- C. Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for quality-control services.

END OF SECTION 014000

SECTION 014100 – SAFETY

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. General: This Section specifies the required safety procedures for Project.
- B. It shall be recognized that the safety of all personnel is the responsibility of each prime contractor involved in the construction of the Project. It is the contractual obligation of each prime contractor to adhere to all requirements of the Occupational Health and Safety Act (OSHA), as well as Local and State safety rules and regulations. Each prime contractor shall assure the safety of their personnel by providing all protection and safety devices, covers, etc. as they relate to the safe conduct of their work in accordance with all Local, State and Federal regulations. Each prime contractor is responsible for any safety requirements that are contractually those of any contractor.
- C. The General Contractor shall be designated as the Lead Prime Contractor with respect to jobsite safety. Responsibilities and authority of the General Contractor shall be as follows:
 - 1. This Contractor will be responsible to inspect and maintain safe working conditions on the jobsite.
 - 2. Where Work of one contractor places another contractor's workers in jeopardy, the Lead Prime Contractor shall direct and coordinate the effort of the other contractors to ensure that jobsite safety is maintained.
 - 3. Maintain a competent person on site at all times designated to make safety inspections and to serve as the designated representative in charge of safety during an inspection by OSHA.
 - 4. Direct another contractor to make corrections in the event of a safety violation. Failure of another contractor to take prompt action (within 24 hours following written notice) to correct a safety violation will empower the Lead Prime Contractor to make the necessary corrections and to receive full compensation for such corrections directly from Owner. Owner will verify and provide documentation of time and material expended to make corrections and in turn will recover the amount of expense from the offending contractor through a deduct Change Order.
 - 5. The Lead Prime Contractor's responsibilities and corresponding authority are as defined in the General Conditions of the Contract for Construction.
 - 6. The individual prime contractors will maintain primary responsibility for the safety of their workers. The Lead Prime Contractor will serve to identify areas of concern and will endeavor to accomplish required corrections through cooperation of the other prime contractors. In the event this effort is unsuccessful, the Lead Prime Contractor will take action as defined above.

7. Owner will make payment to the Lead Prime Contractor when corrective action has been taken on behalf of an offending contractor, and the Lead Prime Contractor has provided appropriate documentation in accordance with contract modification procedures.
8. The Lead Prime Contractor shall provide regular and periodic safety inspections and reports by an independent safety consultant. Inspections and reports shall be performed at least once every three months.
9. Each prime contractor shall provide a safety representative trained in First Aid and CPR.
10. Separation of students and faculty from workers will be required to the extent reasonably possible.

PART 2 - PRODUCTS (Not applicable)

PART 3 - EXECUTION

3.1 ACCIDENTS

- A. Contractor shall notify Owner of any personal injury of any contractor or subcontractor's employees at Project site that could require medical treatment. Also, any damage to property arising in connection with Contractor's performance should be brought to the attention of Owner as promptly as possible after the occurrence of such injury or damage, but no more than 24-hours after the occurrence. Within 48-hours of such occurrence, Contractor shall furnish to Owner a complete written report of such injury or damage. Accident Reports shall include specific actions taken by Contractor to preclude recurrence of similar incidents.

3.2 EMERGENCY DATA

- A. Contractor shall provide Owner with the following emergency data prior to beginning work at Project site:
 1. Emergency care facility to be utilized, including address and telephone number.
 2. Insurance company and local agent/name, address and telephone number.
 3. Detailed description of corporation or company safety program.
 4. Employees qualified in type of first aid; list employee and associated skills.
 5. Detailed description of specifically tailored job site safety program.
 6. Identify corporate and job site safety officer.
 7. Submit weekly TOOLBOX SAFETY TALK program/meeting minutes including:
 - a. Day of week.
 - b. Time of day.
 - c. Location.
 - d. Attendance record.
 - e. Agenda.
 - f. Unsafe items previously discussed and date of correction.
 - g. Identify on-site personnel with First Aid training.
 8. All applicable MSDS Program sheets. (Include numbered pages and Table of Contents).

9. Submit completed hazardous substance survey form.
10. Review project "Emergency Response Plan" with Owner.

3.3 SAFETY AGREEMENT

- A. Contractor shall review and comply with the following Safety Agreement before beginning Work:
 1. As a Contractor under this Contract, you have, by accepting this Contract, obligated yourself to conduct all your operations within this Safety Agreement.
 2. Contractor agrees that the prevention of accidents to employees engaged in the Work under this Agreement is the responsibility of Contractor.
 3. Contractor agrees to comply with all laws, regulations and codes concerning safety as shall be applicable to the Work and to the safety standards established during progress of the Work. When so ordered, Contractor agrees to stop any part of the Work which the Lead Prime Contractor or any other applicable agency may deem unsafe until corrective measures satisfactory to Owner, and in accordance with the applicable Federal and/or State regulations, have been taken and further agrees to make no claim for damages growing out of such stoppages. Should Contractor neglect to adopt such corrective measures, Owner may elect to hire an entity, perform the corrections, and deduct the cost from payments due or to become due Contractor. Failure on the part of Owner to stop unsafe practices shall in no way relieve Contractor of their responsibility.
 4. Contractor recognizes that an effective accident prevention program is to the mutual benefit of all Contractors through improved employee and public relations and through increased efficiency and production. Further, no accident prevention activity can be truly effective without the sincere cooperation of each contractor performing work on the site.
 5. Your attention is directed, but not limited to the following items:

3.4 HOUSEKEEPING

- A. Indiscriminate accumulations of debris, waste or scrap in work areas will not be permitted. Areas will be designated by the Lead Prime Contractor for storage or disposal. All materials, tools and equipment must be stored in an orderly manner in designated areas.

3.5 PERSONAL PROTECTION EQUIPMENT

- A. Contractor must furnish its employees with the proper type of personal protective equipment as required by the operations being performed, including, but not limited to the following:
 1. Hard Hats must be furnished to employees and worn at ALL times when on Project, whether or not an overhead hazard exists or what state of construction Project may be in.
 2. Owner requires that appropriate attire be worn at all times while employees are working onsite. Appropriate attire shall be as deemed necessary by Owner and in accordance with all applicable OSHA regulations.

3.6 SAFETY MEETINGS

- A. Contractor is required to conduct, and all employees are required to attend a “Toolbox” type safety meeting once per week. These meetings may be presided over by either Contractor’s foreman or another competent representative designated by Contractor.

3.7 FIRE PROTECTION

- A. Contractor must supply approved fire extinguishers for emergency use within its own immediate area of operation, including Contractor’s office, tool and storage enclosures.

3.8 TREATMENT OF INJURIES

- A. Contractor shall require that all employees injured (no matter how slight) while working on Project, report immediately for First Aid treatment. Contractor shall maintain adequate First Aid facilities in the field.

3.9 COOPERATION

- A. Any deviation from this course of action will be called to the attention of Contractor for immediate correction. Conversely, Contractor should call attention to any unsafe conditions or unsafe practice by other contractors at the site.

3.10 INSTALLED SAFETY APPARATUS

- A. Contractor is responsible for the installation of any safety apparatus required to perform Work of Project and for the reinstallation of any safety apparatus installed by other contractors if removed to facilitate the installation of their own work.

3.11 WEAPONS POLICY

- A. All persons are prohibited from carrying, possessing or storing a handgun, firearm, or weapon of any kind while on Project site, including in their personal vehicles, regardless of whether the person has registered the weapon or is licensed to carry a concealed weapon. Failure to abide by all terms and conditions of this policy may result in discipline up to and including termination. Further, carrying any weapon onto Owner’s property in violation of this policy will be considered an act of criminal trespass and possession of a weapon will be grounds for immediate removal of the person from Project site, and may result in prosecution.

3.12 LISTENING DEVICES

- A. The playing of radios or any other type of personal listening devices, using any type of speaker, including, but not limited to, headphones and ear buds, will not be permitted on Project site.

3.13 TOBACCO PRODUCTS

- A. Smoking or the use of any tobacco products and vapor pens on any school district-owned property is a violation of both district policy and State law. Violators caught smoking or using tobacco products will be removed from Project and prosecuted to the fullest extent of the law.

3.14 DRUGS AND ALCOHOL

- A. Any personnel caught possessing or using/consuming illegal drugs or alcoholic beverages on any part of school district-owned property will be removed from Project and will be prosecuted to the fullest extent of the law.

END OF SECTION 014100

SECTION 015000 - TEMPORARY FACILITIES & CONTROLS

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes requirements for temporary facilities and controls, including temporary utilities, support facilities, and security and protection.
- B. Temporary utilities include, but are not limited to, the following:
 - 1. Temporary water service and distribution.
 - 2. Temporary electrical power service and light.
 - 3. Storm facilities and sanitary sewer.
- C. Support facilities include, but are not limited to, the following:
 - 1. Field offices and storage sheds.
 - 2. Handwashing stations and supplies, hand sanitizer and dispensers, and cleaning and sanitizing requirements.
 - 3. Temporary roads and paving.
 - 4. Dewatering facilities.
 - 5. Temporary enclosures.
 - 6. Hoists.
 - 7. Temporary project identification signs and bulletin boards.
 - 8. Waste disposal services.
 - 9. Rodent and pest control.
 - 10. Construction aids and miscellaneous services and facilities.
 - 11. Temporary heat, ventilation and humidification control.
 - 12. Sanitary facilities, including drinking water.
- D. Security and protection facilities include, but are not limited to, the following:
 - 1. Temporary Fire Protection.
 - 2. Barricades, warning signs, and lights.
 - 3. Enclosure and separation fencing for the site work areas
 - 4. Environmental protection.

1.3 DIVISION OF RESPONSIBILITIES

- A. General: These Specifications assign each Prime Contractor specific responsibilities for certain temporary facilities used by other Prime Contractors, and other entities at the Site. Contractor for General Construction is responsible for providing temporary facilities and controls that are not the normal construction activities of another Prime Contractor, and are not specifically assigned otherwise.
- B. Each Prime Contractor is responsible for the following:
 - 1. Installation, operation, maintenance, and removal of each temporary facility usually considered as its own normal construction activity, as well as the costs and use charges associated with each facility unless noted otherwise.
 - 2. Plug-in electric power cords and extension cords, supplementary plug-in task lighting, and special lighting necessary for its own construction activities.
 - 3. Multi-phase power service or power requirements in excess of 120-V, single phase, temporary power. Electric service for welding. All welding equipment to be provided by each contractor via a generator. No welding equipment can connect to the building's existing electrical service.
 - 4. Temporary heat, ventilation, humidity control, and enclosure of the building where these facilities are necessary for its own activities but have not yet been installed by the responsible Prime Contractor. Refer to the "Temporary Heat" Paragraph in Part 3 below for additional information.
 - 5. In accordance with all CDC recommendations and any state or federally mandated protocols or requirements, proper cleaning and sanitizing of its own field office, storage sheds, tools, and support facilities for which it is responsible.
 - 6. Containerized bottled-water drinking-water units.
 - 7. Dewatering, including ice and snow removal, for areas specific to its own Work.
 - 8. All hoisting requirements necessary for its own construction activities.
 - 9. Continuous removal and disposal of general construction waste and debris generated by its own construction activities, including providing its own dumpsters.
 - 10. Collection and proper disposal of its own hazardous, dangerous, unsanitary or other harmful waste material.
 - 11. Secure lockup of its own tools, materials and equipment.
 - 12. Construction aids and miscellaneous services and facilities necessary for its own activities.
 - 13. Its own job trailer or field office.
 - 14. Its own storage and fabrication sheds or trailers.
 - 15. Temporary safety facilities necessary for its own construction activities.
 - 16. Each Prime contractor can have one office trailer and one Sea storage container for their work.
 - 17. The GC will be providing the temporary fencing around the construction area as shown on the plans. Should any Prime need to move the fencing to do their work they need to remove and re-install it at their expense. The temporary fencing can never be left open over night. It must be secure at the end of each work day.
- C. The General Contractor is responsible for the following:
 - 1. Temporary enclosure of the building.

2. Temporary heat to the extent described in the "Temporary Heat" Paragraph in Part 3 below.
3. All temporary toilets, including disposable supplies.
4. Handwashing stations and hand sanitizer dispensers located in each work area of the site.
5. Temporary ventilation and humidity control upon enclosure of the building (either temporary or permanent) and up to the final stage of the Work of the Project or of any defined phase of the Project (the point where the building is enclosed and the permanent HVAC systems are available to provide the same) in accordance with the HVAC Contractor's responsibilities identified in this Section.
6. Dewatering, including ice and snow removal of the building pad and in areas of foundation excavation and for all general construction activities, within 24 hours of the occurrence requiring the need for dewatering.
7. Temporary roads required to complete general construction activities. This includes the temporary 12-inch thick stone laydown areas as shown on the plans.
8. General security enclosure and lockup.
9. A field office for Owner's Representative shall be included within the GC's office trailer. Trailer should have a bathroom and a large meeting room to accommodate project meetings for up to 16 people.
10. Temporary construction identification signs and temporary site directional signage.
11. Rodent and pest control.
12. Barricades, warning signs, and lights for general construction activities.
13. Enclosure fence as required by general construction activities. Refer to site drawings for extent.
14. Environmental protection for general construction activities.
15. Temporary stairway construction. Provide temporary scaffolding stairs to the roof of each of the three additions. Coordinate locations with Owner's Rep and other Prime Contractors.
16. GC to provide temporary "cattle chute" enclosure through the front addition as shown on the plans. Means and methods are up to the GC however it must be 8ft wide, 8 ft tall, and be constructed of ½ plywood walls and ceilings that are to also be covered in 6 mil heavy duty plastic. Spray foam bottom of the wall to the slab on grade.

D. The HVAC Contractor is responsible for the following:

1. Completion of installation of the permanent heating systems for use as temporary heat and air conditioning, ventilation and humidity control for the final stage of the Work of the Project or of any defined phase of construction. The final stage of the Work shall be as defined below in this Section. Refer to the Project Milestones for when the permanent HVAC system should be up and running to temper the two additions.
2. Operation and maintenance of the permanent HVAC systems when used for temporary heat and air conditioning, ventilation and humidity control.

E. The Plumbing Contractor is responsible for the following:

1. Temporary heat to the extent described in the Paragraph "Temporary Heat" in Part 3 below.

2. Temporary water service. Prior to temporary utility availability, provide trucked-in service. PC to use existing water service in the building to provide a hose bib at the exterior for the rear two additions for the GC to use for their work.

F. The Electrical Contractor is responsible for the following:

1. Temporary electrical power service and distribution for general project use. Prior to temporary utility availability, provide trucked in service.
2. Temporary electric service to all project field offices. Assume providing service in the laydown area to 5 trailers, one GC, one HC, one EC, one PC and one Owner's Representative.
3. Temporary lighting throughout the three additions during construction until permanent lighting can be turned on.
4. Temporary heat to the extent described in the Paragraph "Temporary Heat" in Part 3 below.
5. Provide temporary lighting in the "cattle chute" that runs through the front addition for access of students and staff through the existing front door.

1.4 USE CHARGES

- A. General: For temporary power and water the owner will pay all use charges.
- B. Water Service: Owner will pay water service use charges, for all metered water used by all entities engaged in construction activities at the Project site.
- C. Water Service within Renovation Areas: Temporary water services within the existing building area to be renovated may be developed from existing building utilities approved by Owner. Water service use charges for incidental use in renovation areas will be paid for by Owner if they are developed from sources currently metered by Owner. Such services may be developed only if adequate service is available without disruption to existing facility operations and must be limited to work directly associated with the Project.
- D. Electric Power Service: Owner will pay electric power service use charges, for all metered electric power used by all entities engaged in construction activities at the Project site. Owner's electric service is NOT permitted to be used for temporary heat or any high voltage purposes such as welding.
- E. Electric Power Service within Renovation Areas: Incidental electrical power use in renovation areas may be developed from existing facilities at locations approved by Owner. Electric power service use charges for incidental use in renovation areas will be paid for by Owner if they are developed from sources currently metered by Owner. Incidental power usage shall be defined as temporary lighting and temporary power for small tools, (120v). Existing power sources may not be utilized for temporary heat, welding, or other high voltage power requirements.
- F. Fuel for Temporary Heat: As described in the Temporary Heat paragraph.

1.5 SUBMITTALS

- A. Temporary Utilities: Each Prime Contractor shall submit reports of tests, inspections, meter readings and similar procedures performed on temporary utilities.
- B. Implementation and Termination Schedule: Within 15 days of the date established for submittal of Contractor's Construction Schedule, each Prime Contractor shall submit a schedule indicating implementation and termination dates of each temporary utility for which Contractor is responsible.

1.6 QUALITY ASSURANCE

- A. Regulations: Each Prime Contractor shall comply with industry standards and with applicable laws and regulations of authorities having jurisdiction including, but not limited to, the following:
 - 1. Building code requirements.
 - 2. Health and safety regulations.
 - 3. Utility company regulations.
 - 4. Police, fire department and rescue squad rules.
 - 5. Environmental protection regulations.
- B. Standards: Each Prime Contractor shall comply with NFPA 241 "Standard for Safeguarding Construction, Alterations, and Demolition Operations", ANSI-A10 Series standards for "Safety Requirements for Construction and Demolition", and NECA Electrical Design Library "Temporary Electrical Facilities".
 - 1. Trade Jurisdictions: Assigned responsibilities for installation and operation of temporary utilities are not intended to interfere with the normal application of trade regulations and union jurisdictions.
 - 2. Electrical Service: Comply with NEMA, NECA and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70.
- C. Inspections: Arrange for authorities having jurisdiction to inspect and test each temporary utility before use. Obtain required certifications and permits.

1.7 PROJECT CONDITIONS

- A. Temporary Utilities: Each Prime Contractor shall prepare a schedule indicating dates for implementation and termination of each temporary utility for which Contractor is responsible. At the earliest feasible time, when acceptable to Owner, change over from use of temporary services to use of permanent services.
 - 1. Temporary Use of Permanent Facilities: The Installer of each permanent service shall assume responsibility for its operation, maintenance and protection during use as a construction facility prior to Owner's acceptance, regardless of previously assigned responsibilities. The installing contractor shall make permanent facilities available in accordance with the approved Contractor's Construction Schedule.

2. Warranty Period: The Warranty Period for the entire project shall begin on the date of Substantial Completion of the Project, or a designated PRIMARY phase of the Project regardless of the start-up date for use as a temporary or permanent facility, including but not limited to materials and equipment.

- B. Conditions of Use: Keep temporary services and facilities clean and neat in appearance. Operate in a safe and efficient manner. Relocate temporary services and facilities as the Work progresses. Do not overload facilities or permit them to interfere with progress. Take necessary fire-prevention measures. Do not allow hazardous, dangerous or unsanitary conditions, or public nuisances to develop or persist on-site.

1.8 EXISTING BUILDING SYSTEMS

- A. Contractor, in submitting a bid, certifies that they have familiarized themselves with all existing building conditions and systems encountered. Contractor shall protect and maintain all existing building systems, functions and utilities during the construction period or until new Work replaces the aforementioned.
- B. System Interruption: If there is a need to interrupt any existing building function, utility or system for an extended period of time, Contractor must coordinate this with Owner and provide temporary provisions in advance to replace the interrupted function, utility or system.
- C. Existing Systems, Functions and Utilities: The following is a partial list, which is not all inclusive, of the existing Systems, Functions and Utilities:
 1. Existing electrical service, including all associated systems and functions.
 2. Existing water service, domestic and hot water systems.
 3. Sanitary and storm water systems.
 4. Existing HVAC systems, boilers and units.
 5. Existing BAS and/or ATC systems.
 6. Existing compressed air systems
 7. Existing lighting systems.
 8. Existing data and communications systems.
 9. Existing structural systems.
 10. Existing fire alarm systems.
 11. Existing building security systems.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. General: Each Prime Contractor shall provide new materials. If acceptable to Owner or Architect, undamaged, previously used materials in serviceable condition may be used. Provide materials suitable for the use intended.
- B. Lumber and Plywood: Comply with the requirements of Division 6 Section "Rough Carpentry".

1. For job-built temporary offices, shops, and sheds within the construction area, provide UL-labeled, fire-treated lumber and plywood for framing, sheathing, and siding.
 2. For signs and directory boards, provide exterior-type, Grade BB, high-density concrete form grade overlay plywood of sizes and thicknesses indicated.
 3. For fences and vision barriers, provide minimum 3/8-inch thick exterior plywood.
 4. For safety barriers, sidewalk bridges, and similar uses, provide minimum 5/8-inch thick exterior plywood.
- C. Tarpaulins: Provide waterproof, fire-resistant, UL-labeled tarpaulins with flame-spread rating of 15 or less. For temporary enclosures, provide translucent, nylon-reinforced, laminated polyethylene or polyvinyl chloride, fire-retardant tarpaulins.
- D. Water: Provide potable water approved by local health authorities.
- E. Open-Mesh Fencing (Driven Posts): Provide 0.12-inch thick, galvanized 2-inch chain-link fabric fencing 6 feet high with galvanized steel pipe posts, 1-1/2-inches I.D. for line posts and 2-1/2 inches I.D. for corner posts.
- F. Open-Mesh Fencing (Portable): Provide 0.12-inch thick, galvanized 2-inch chain-link fabric fencing 6 feet high on portable frames with self-standing T-foot posts

2.2 EQUIPMENT

- A. General: Each prime contractor shall provide new equipment. If acceptable to Owner or Architect, undamaged, previously used equipment in serviceable condition may be used. Provide equipment suitable for the use intended.
- B. Water Hoses: Provide 3/4-inch heavy-duty, abrasion-resistant, flexible rubber hoses 100 feet long, with pressure rating greater than the maximum pressure of the water distribution system. Provide adjustable shutoff nozzles at point of hose discharge.
- C. Electrical Outlets: Provide properly configured, NEMA-polarized outlets to prevent insertion of 110- to 120-V plugs into higher voltage outlets. Provide 120-V, single phase, ground-fault outlets at 100' on center in corridor areas and spaces larger than 800 square feet. Provide receptacle outlets equipped with ground-fault circuit interrupters, reset button, and pilot light for connection of power tools and equipment.
- D. Electrical Power Cords: Provide grounded extension cords. Use hard-service cords where exposed to abrasion and traffic. Provide waterproof connectors to connect separate lengths of electric cords if single lengths will not reach areas where construction activities are in progress. Do not exceed safe length-voltage ratio.
- E. Lamps and Light Fixtures: Provide general service lamps of wattage required for adequate illumination. At a minimum, install weatherproof sockets complete with lamps at 20' on center in all corridor areas, circulation areas and all spaces over 400 square feet. Provide guard cages or tempered-glass enclosures where exposed to breakage. Provide exterior fixtures where exposed to moisture.

- F. Heating Units: Provide temporary heating units that have been tested and labeled by UL, FM or another recognized trade association related to the type of fuel being consumed.
- G. Temporary Offices: Each Prime Contractor shall provide its own prefabricated or mobile units with lockable entrances, operable windows and serviceable finishes.
1. The General Contractor, if their temporary office trailer is not sufficiently sized to accommodate the needs of regular job conferences, shall provide and maintain, in addition to their job trailer, a meeting trailer for such use, for the duration of the Project. The meeting trailer shall be complete with a heating and air-conditioning unit capable of maintaining a temperature range of between 70 deg. F and 75 deg. F year-round. At a minimum, include the following fixtures, furniture and equipment:
 - a. Conference table to comfortably accommodate at least twelve (12) adults
 - b. Twenty (20) chairs
 - c. One (1) water cooler
 - d. One (1) copier/scanner
 - e. Four (4) trash receptacles
 - f. Blinds for each window
 - g. Three (3) desks, one (1) drafting table, one (1) plan rack
 - h. Two (2) four-drawer locking file cabinets
 - i. Two (2) 36" x 48" dry erase boards
 2. The General Contractor shall provide and maintain a minimum 12'x40' field office trailer, complete with a heating and air-conditioning unit capable of maintaining a temperature range of between 70 deg. F and 75 deg. F year round, for use by Owner's full time representative. At a minimum, include the following fixtures, furniture and equipment:
 - a. One (1) desk with typewriter return
 - b. Two (2) chairs
 - c. One (1) trash receptacle
 - d. One (1) window at a minimum
 - e. Blinds for each window
 - f. One (1) four-drawer locking file cabinet
 - g. One (1) 36" x 48" dry erase board
 - h. One bathroom with trailer
 3. The General Contractor shall provide all required electrical and plumbing. Use charges for all metered electrical and water will be paid by Owner.
 4. Provide daily housekeeping services, provide snow removal services and relocate the field office trailer to a secondary location should the original location serve to impede the progress and/or completion of the Project.
- H. Temporary Toilet Units: Provide self-contained, single-occupant toilet units of the chemical, aerated recirculation or combustion type. Provide units properly vented and fully enclosed with a glass-fiber-reinforced polyester shell or similar non-absorbent material.
- I. Handwashing Stations: Provide at a minimum, self-contained handwashing stations complete with clean, potable water, soap and disposable towels.

- J. Hand Sanitizing Stations: Provide self-contained hand sanitizer dispensers complete with hand sanitizer.
- K. Fire Extinguishers: Provide hand-carried, portable, UL-rated, Class A fire extinguishers for temporary offices and similar spaces. In other locations, provide hand-carried, portable, UL-rated, Class ABC, dry-chemical extinguishers or a combination of extinguishers of NFPA-recommended classes for the exposures.
 - 1. Comply with NFPA 10 and NFPA 241 for classification, extinguishing agent and size required by location and class of fire exposure.
- L. First Aid Supplies: Comply with regulations of authorities having jurisdiction.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Use qualified personnel for the installation of temporary facilities. Locate facilities where they will serve the Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required.
- B. Each Prime Contractor shall provide each facility ready for use when needed to avoid delay. Maintain and modify as required. Do not remove until facilities are no longer needed or are replaced by authorized use of completed permanent facilities.

3.2 TEMPORARY UTILITY INSTALLATION

- A. General: Engage the appropriate local utility company to install temporary service or connect to existing service. For this project EC to use existing building power for temporary power. See electrical drawings for what panels to use. Where the utility company provides only part of the service, provide the remainder with matching, compatible materials and equipment. Comply with utility company recommendations.
 - 1. Arrange with the utility company and existing users for a time when service can be interrupted, if necessary, to make connections for temporary services.
 - 2. Provide adequate capacity at each stage of construction. Prior to temporary utility availability, provide trucked-in services.
- B. Water Service: Install water service and distribution piping of sizes and pressure adequate for construction until permanent water service is in use. PC to provide one hose bib location at each addition.
- C. Temporary Electric Power Service: Provide weatherproof, grounded electric power service and distribution system of sufficient size, capacity and power characteristics during construction period. Include meters, transformers, overload-protected disconnects, automatic ground-fault interrupters and main distribution switch gear.

1. Power Distribution System: Install wiring overhead and rise vertically where least exposed to damage. Where permitted, wiring circuits not exceeding 125 V, ac 20 ampere rating, and lighting circuits may be nonmetallic sheathed cable where overhead and exposed for surveillance.
- D. Temporary Lighting: When an overhead floor or roof deck has been installed, provide temporary lighting with local switching.
 1. Install and operate temporary lighting that will fulfill security and protection requirements without operating the entire system. Provide temporary lighting to the greater of that required by OSHA or to a minimum level of 20 fc, and that will provide adequate illumination for construction operations and traffic conditions.
- E. Temporary Heat: As described in the Temporary Heat paragraph below.
- F. Heating Facilities: As described in the Temporary Heat paragraph below.
- G. Sanitary Facilities: Sanitary facilities include temporary toilets, wash facilities, and drinking-water fixtures. Comply with regulations and health codes for the type, number, location, operation and maintenance of fixtures and facilities. Install where facilities will best serve the Project's needs.
 1. Provide toilet tissue, paper towels, paper cups and similar disposable materials for each facility. Provide covered waste containers for used material.
- H. Toilets: Install self-contained toilet units. Shield toilets to ensure privacy. Use of pit-type privies will not be permitted.
 1. Provide separate facilities for male and female personnel.
- I. Environmental Protection: In addition to the provisions indicated on the drawings, provide earthen embankments and similar barriers in and around excavations and sub-grade construction, sufficient to prevent flooding by runoff of storm water from heavy rains.

3.3 TEMPORARY HEAT

- A. Temporary Heat: Provide temporary heat required by construction activities, for curing or drying of completed installations, or protection of installed construction from adverse effects of low temperatures or high humidity. Select safe equipment that will not have a harmful effect on completed installations or elements being installed. Coordinate ventilation requirements to produce the ambient conditions required and minimize consumption of energy. GC to provide temporary heat until permanent systems are up and running per the Project Milestones.
 1. Provide temporary heat at varying stages of the Project to allow construction operations to proceed in an orderly, sequential manner. The following stages are milestones that must be clearly identified on Contractor's Construction Schedule as described in Division 1 Section "Construction Progress Documentation." The stages of the project are defined as follows:

- a. Early Stage: The duration of the Project from the start of construction to enclosure of the building. During this stage, each Prime Contractor is responsible to provide temporary heat and any temporary enclosure required to contain the heated air necessary for its own construction activities. Each Prime Contractor is responsible to furnish the equipment and fuel for their own temporary heating.
 - b. Intermediate Stage: The duration of the Project from the time the building is wholly or partially enclosed as determined solely by Architect but prior to the operation of the permanent HVAC equipment for construction heating. During this stage, the General Contractor shall provide temporary heating to establish an ambient air temperature and appropriate humidity level in the building, or portion thereof, to maintain construction activities for all Prime Contractors, including the provision of necessary equipment and fuel. A minimum ambient air temperature of 50 degrees F must be capable of being maintained throughout the area of Work receiving temporary heat and humidity control. Maintain an appropriate humidity level acceptable to material manufacturers for the installation of materials and finishes.
 - c. Final Stage: The duration of the Project after building enclosure is attained and the permanent HVAC equipment is available to provide temporary heat, air conditioning, ventilation, and humidity control as determined solely by Architect. The Final Stage of construction shall be achieved – per the Project Milestones. An ambient air temperature of 70 degrees F must be capable of being maintained uniformly. The HVAC Contractor is responsible to provide start-up, maintenance and operation of all permanent HVAC units and provide temporary automatic temperature control wiring and devices to properly regulate the permanent devices. Further, the HVAC Contractor shall protect all ductwork, and shall install temporary filter media with a minimum rating of MERV 8 according to ASHRAE 52.2, at every return grill or air inlet to the air handling system. All temporary filters shall be fully sealed around the perimeter to seal off any dust from entering the return ductwork. All duct protection measures shall be reviewed with the CxA prior to starting up the units for use as temporary heat. Replace all filters immediately prior to Building Occupancy. Owner will pay all use charges and fuel costs for temporary heat during the Final Stage of construction. The Electrical Contractor is responsible to have all permanent HVAC units that will provide temporary heat, wired with their required power with service disconnects and all other NEC requirements. If power cannot be provided using the permanent electrical panel, wiring or distribution, then the Electrical Contractor must provide temporary means to meet the needs of the units. The Plumbing Contractor is responsible to have all permanent gas-fired HVAC units that will be used to provide temporary heat, connected to a source for gas that will provide the necessary pressure and volume to operate the units as if they are in normal use, including compliance with applicable codes. If gas cannot be provided using the permanent gas system for the building, then the Plumbing Contractor must provide temporary means to meet the needs of the units.
2. Temporary heat shall be initiated and maintained to allow the performance of Work for which a particular minimum ambient temperature must be maintained to meet the criteria described in individual sections of the technical specifications and as set forth by manufacturer's recommendations.

3. Temporary heat shall be provided to ensure that construction activities conform with Contractor's Construction Schedule and to the scheduling sequence established by the Lead Contractor and as further directed by Architect.
 4. The term "building enclosure" refers to a level of completion of the building, or a designated portion thereof, that consists of the following:
 - a. Construction of roof structure, roof, insulation and roofing membrane
 - b. Construction of back-up masonry or exterior metal studs with exterior sheathing
 - c. Temporary enclosure of exterior wall openings. Refer to the "Temporary Enclosures" paragraph below for additional information.
- B. Heating Facilities: Except where use of the permanent system is noted above, provide properly vented, self-contained LP gas or natural gas heaters with individual space thermostatic control.
1. Use of gasoline, oil or kerosene fueled space heaters is prohibited.

3.4 SUPPORT FACILITIES INSTALLATION

- A. Storage and Fabrication Facilities: Install storage and fabrication sheds or mobile trailers, sized, furnished and equipped to accommodate materials and equipment involved. Facilities may be open shelters or fully enclosed.
- B. Drinking Water Facilities: Provide containerized tap dispenser bottled water type drinking water units, including disposable paper supply.
- C. Handwashing and Hand Sanitizer Stations: In accordance with all CDC recommendations and any state or federally mandated protocols or requirements, locate handwashing stations and hand sanitizer dispensers, reasonably accessible to all workers, and at a minimum, in all active work areas of the Project.
- D. Dewatering Facilities and Drains: Maintain the site, excavations and construction free of water, ice and snow.
- E. Temporary Enclosures: Provide temporary enclosure for protection of construction in progress and completed, from exposure, foul weather, other construction operations and similar activities.
1. Where heat is needed and the permanent building enclosure is not complete, provide temporary enclosures where there is no other provision for containment of heat. Coordinate enclosure with ventilating and material drying or curing requirements to avoid dangerous conditions and effects.
 2. Install tarpaulins securely, with non-combustible wood framing and other materials. Close openings of 25 square feet or less with plywood or similar materials.
 3. Close openings through floor or roof decks and horizontal surfaces with load bearing wood framed construction.
- F. Temporary Lifts and Hoists: Provide facilities for hoisting materials and employees. Truck cranes and similar devices used for hoisting materials are considered "tools and equipment"

and not temporary facilities. GC to provide a location at each addition on the 1st and 2nd floors for all Primes to use for loading the building until a point mutually agreed upon to close it up.

- G. The contractors can use the existing elevator only after the loading points are closed up to get materials up to the second floor. GC is responsible to protect the elevator's walls and floors until all work is completed. The elevator can only be used on "off hours" as defined in the specifications while school is in session. During the summer of 2025 the elevator can be used during normal working hours.
- H. Project Identification and Temporary Signs: Prepare project identification and other signs of the size indicated; install where indicated to inform the public and persons seeking entrance to the Project. Support on posts or framing of preservative treated wood or steel. Do not permit installation of unauthorized signs.
 - 1. Project Identification Signs: Engage an experienced sign painter to apply graphics. Comply with details indicated.
- I. Collection and Disposal of Waste: Collect waste from construction areas and elsewhere daily. Comply with requirements of NFPA 241 for removal of combustible waste material and debris. Enforce requirements strictly. Do not hold materials more than 7 days during normal weather or 3 days when the temperature is expected to rise above 80 deg F. Handle hazardous, dangerous or unsanitary waste materials separately from other waste by containerizing properly. Dispose of material in a lawful manner.
- J. Rodent and Pest Control: Before foundation Work has been completed, retain a local exterminator or pest control company to recommend practices to minimize attraction and harboring of rodents, roaches and other pests. Employ this service to perform extermination and control procedures at regular intervals so the Project will be relatively free of pests and their residues at Substantial Completion. Perform control operations in a lawful manner using environmentally safe materials.
- K. Temporary Stairs: Until permanent stairs are available, provide temporary stairs where ladders are not adequate. Cover finished permanent stairs with a protective covering of plywood or similar material so finishes will be undamaged at the time of acceptance.
- L. Locate field offices, storage sheds, sanitary facilities and other temporary construction and support facilities for easy access. If not indicated on the drawings, verify temporary facility locations with Owner prior to installation.
 - 1. Maintain support facilities until near Substantial Completion.
- M. Temporary Roads: Construct and maintain temporary roads to support the required loading adequately and to withstand exposure to traffic during the construction period. To the greatest extent possible, locate temporary roads, storage areas and parking where the same permanent facilities will be located.
 - 1. Paving: Comply with Project specifications for construction and maintenance of temporary paving.

2. Coordinate temporary paving development with sub-grade grading, compaction, installation and stabilization of sub-base and installation of base and finish courses of permanent paving.
3. Install temporary paving to minimize the need to rework the installations and result in permanent roads and paved areas without damage or deterioration when occupied by Owner.
4. Extend temporary paving in and around the construction area as necessary to accommodate delivery and storage of materials, equipment usage, administration, and supervision.

3.5 SECURITY AND PROTECTION FACILITIES INSTALLATION

- A. General: Except for use of permanent fire protection as soon as available, do not change over from use of temporary security and protection facilities to permanent facilities until Substantial Completion, or longer as requested by Architect.
- B. Temporary Fire Protection: Until fire-protection needs are supplied by permanent facilities, install and maintain temporary fire-protection facilities of the types needed to protect against reasonably predictable and controllable fire losses. Comply with NFPA 10, "Standard for Portable Fire Extinguishers," and NFPA 241, "Standard for Safeguarding Construction, Alterations, and Demolition Operations."
 1. Locate fire extinguishers where convenient and effective for their intended purpose, but not less than one extinguisher on each floor at or near each usable stairwell.
 2. Maintain unobstructed access to fire extinguishers, fire hydrants, temporary fire-protection facilities, stairways and other access routes for fighting fires. Prohibit smoking in hazardous fire-exposure areas.
 3. Provide supervision of welding operations, combustion-type temporary heating units and similar sources of fire ignition.
- C. Permanent Fire Protection: At the earliest feasible date in each area of the Project, complete installation of the permanent fire-protection facility, including connected services, and place into operation and use. Instruct key personnel on use of facilities.
- D. Storage of Flammable and Combustible Materials and Liquids: Comply with NFPA 241, "Standard for Safeguarding Construction, Alterations, and Demolition Operations" and NFPA 30, "Flammable and Combustible Liquid Code"
 1. Storage: Store flammable and combustible materials and liquids in weathertight, ventilated and secure facilities outside of the building. Provide temporary fire protection facilities of the types needed to protect against reasonably predictable and controllable fire and losses.
- E. Barricades, Warning Signs, and Lights: Comply with standards and code requirements for erecting structurally adequate barricades. Paint with appropriate colors, graphics and warning signs to inform personnel and the public of the hazard being protected against. Where appropriate and needed, provide lighting, including flashing red or amber lights.

- F. Enclosure Fence: When excavation begins, install a lockable entrance gate and post "No Trespassing" signs at 50' on center around the site perimeter.
- G. Security Enclosure and Lockup: Install substantial temporary enclosure of partially completed areas of construction. Provide locking entrances to prevent unauthorized entrance, vandalism, theft and similar violations of security.
 - 1. Storage: Where materials and equipment must be stored, and are of value or attractive for theft, provide secure lockup. Enforce discipline in connection with the installation and release of material to minimize the opportunity for theft and vandalism.
- H. Construction Barriers: Install construction barriers at locations indicated on the drawings, or if not indicated, where required to maintain separation between occupied areas and areas involved in construction. Construction barriers shall be constructed of nominal 2-inch x 4-inch wood studs at 24 inch o.c. with 1/2 inch OSB or plywood secured to the occupied side of the barrier with 2 inch Philip's head screws at 12 inch o.c. Extend construction barriers from masonry wall to masonry wall and from existing structural floor up to 8'-0" aff. Install a sealed poly-barrier from the top of the 8'-0" temporary barrier up to the underside of the structural floor or roof deck above. Where authorized by Owner, provide secure locking doorways of similar construction with non-removable pin hinges, pad locked on the construction side. Where doorways are approved by Owner, all keys shall be delivered to Owner. When access through doorways is desired, access must be approved by Owner.
 - 1. Install construction barriers in accordance with applicable codes. Do not create dead-end corridors or other non-compliant egress conditions.
- I. Environmental Protection: Provide protection, operate temporary facilities and conduct construction in ways and by methods that comply with environmental regulations, and minimize the possibility that air, waterways, and subsoil might be contaminated or polluted or that other undesirable effects might result. Avoid using tools and equipment that produce harmful noise. Restrict use of noise-making tools and equipment to hours that will minimize complaints from persons, homes or businesses near the site.

3.6 OPERATION, TERMINATION, AND REMOVAL

- A. Supervision: Enforce strict discipline in the use of temporary facilities. Limit availability of temporary facilities to essential and intended uses to minimize waste and abuse.
- B. Maintenance: Maintain facilities in good operating condition until removal. Protect from damage by freezing temperatures and similar elements.
 - 1. Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation and similar facilities on a 24-hour basis where required to achieve indicated results and to avoid possibility of damage.
 - 2. Protection: Prevent water-filled piping from freezing. Maintain markers for underground lines. Protect from damage during excavation operations.

- C. Termination and Removal: Unless Owner requests that it be maintained longer, remove each temporary facility when the need has ended, when replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with the temporary facility. Repair damaged Work, clean exposed surfaces and replace construction that cannot be satisfactorily repaired.
1. Materials and facilities that constitute temporary facilities are the property of each Prime Contractor. Owner reserves the right to take possession of project identification signs.
 2. Remove temporary paving not intended for or acceptable for integration into permanent paving. Where the area is intended for landscape development, remove soil and aggregate fill that do not comply with requirements for fill or subsoil in the area. Remove materials contaminated with road oil, asphalt and other petrochemical compounds, and other substances that might impair growth of plant materials or lawns. Repair or replace street paving, curbs, and sidewalks at the temporary entrances, as required by the governing authority.
 3. At Substantial Completion, clean and renovate permanent facilities used during the construction period including, but not limited to, the following:
 - a. Replace air filters and clean inside of ductwork and housings.
 - b. Replace significantly worn parts and parts subject to unusual operating conditions.
 - c. Replace lamps burned out or noticeably dimmed by hours of use.

END OF SECTION 015000

SECTION 017200 - PROJECT RECORD DOCUMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for Project Record Documents.
- B. Project Record Documents required include the following:
 - 1. Copies of Record Drawings.
 - 2. Record Samples.
- C. Related Sections: The following Sections contain requirements that relate to this Section:
 - 1. Division 1 Section "Submittals" specifies general requirements for preparing and submitting Project Record Documents.
 - 2. Division 1 Section "Operation and Maintenance Data" specifies requirements regarding submittal of operation and maintenance manuals.
 - 3. Division 1 Section "Contract Closeout" specifies general closeout requirements.
 - 4. Divisions 2 through 33 Sections for specific Project Record Document requirements.
- D. Multiple Prime Contracts: Each prime contractor is responsible for obtaining, maintaining and recording Project Record Document information for its own work. Contractor for General Construction is responsible for coordinating information, where information from more than one prime contractor is to be integrated with information from other prime contractors to form one combined record.
- E. Maintenance of Documents and Samples: Store Project Record Documents and Samples in field office apart from Contract Documents used for construction. Do not use Project Record Documents for construction purposes. Maintain record documents in good order and in a clean, dry, legible condition. Make Project Record Documents and Samples available at all times for Architect's and Owner's inspection.

1.3 RECORD DRAWINGS

- A. Markup Procedures: During construction, maintain a set of black-line white prints of Contract Documents and Shop Drawings for Project Record Document purposes. Do not use record documents for construction purposes. Protect Project Record Documents from deterioration and loss in a secure, fire-resistant location. Provide access to Project Record Documents for Architect's reference during normal working hours.

1. Mark drawings to show the actual installation where the installation varies from the installation shown on Contract Documents. Give particular attention to information on concealed elements that would be difficult to identify or measure and record later. Items required to be marked include, but are not limited to, the following:
 - a. Dimensional changes to Drawings.
 - b. Revisions to details shown on Drawings.
 - c. Depths of foundations below the first floor.
 - d. Locations and depths of underground utilities.
 - e. Revisions to routing of piping and conduits.
 - f. Revisions to electrical circuitry.
 - g. Actual equipment locations.
 - h. Duct sizes and routing.
 - i. Locations of concealed internal utilities.
 - j. Changes made by Change Order or Construction Change Directive.
 - k. Changes made following Architect's written orders.
 - l. Details not on original Contract Documents.
 2. Mark record prints of Contract Documents or Shop Drawings, whichever is most capable of showing actual physical conditions, completely and accurately. Where Shop Drawings are marked, show cross-reference on Contract Document location.
 3. Mark record sets with red erasable colored pencil. Use other colors to distinguish between changes for different categories of the work at the same location.
 4. Mark important additional information that was either shown schematically or omitted from original Drawings.
 5. Note Construction Change Directive numbers, alternate numbers, Change Order numbers, and similar identification.
- B. Responsibility for Markup: Contractor shall prepare the Project Record Documents.
1. Accurately record information in an understandable drawing technique.
 2. Record data as soon as possible after obtaining it. Record and check the markup prior to enclosing concealed installations.
 3. At the time of Substantial Completion, submit record drawings to Architect for Owner's records. Organize Drawings into sets and bind and label sets for Owner's continued use.
- C. Copies and Distribution: Print 3 black-line prints of each drawing, whether or not changes and additional information were recorded. Organize the copies into manageable sets. Bind each set with durable-paper cover sheets. Include appropriate identification, including titles, dates, and other information on the cover sheets.
1. Organize and bind the original marked-up set of prints that were maintained during the construction period in the same manner.
 2. Organize print sets. Place sets in durable tube-type drawing containers with end caps. Mark the end cap of each container with suitable identification.
 3. Submit marked-up record sets and three (3) copy sets to Architect for Owner's records; Architect will retain one (1) copy set.

1.4 RECORD SAMPLE SUBMITTAL

- A. Immediately prior to the date of Substantial Completion, meet with Owner at Project site to determine which of the samples maintained during the construction period shall be transmitted to Owner for record purposes. Comply with Architect's instructions for packaging, identification marking, and delivery to Owner's sample storage space. Dispose of other Samples in a manner specified for disposing surplus and waste materials.

1.5 MISCELLANEOUS RECORD SUBMITTALS

- A. Refer to individual Specification Sections in Divisions 2 through 33 for additional record-keeping requirements and submittals in connection with various construction activities. Immediately prior to Substantial Completion, complete miscellaneous records and place in good order, properly identified and bound or filed, ready for use and reference. Submit to Architect for Owner's records.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

3.1 RECORDING

- A. Post changes and modifications to the Documents as they occur. Do not wait until the end of the Project.

END OF SECTION 017200

SECTION 017700 - CONTRACT CLOSEOUT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for Contract Closeout including, but not limited to, the following:
 - 1. Inspection procedures.
- B. Closeout requirements for specific construction activities are included in the appropriate Sections in Divisions 2 through 33.
- C. Related Sections: The following Sections contain requirements that relate to this Section.
 - 1. Division 1 Section "Applications for Payment" for information regarding the application which first follows Substantial Completion, and for information regarding the Final Application for Payment.
 - 2. Division 1 Section "Final Cleaning" for additional information regarding project closeout, cleaning and punch list requirements.
- D. In the event that Additional Services by Architect are made necessary by the actions or inactions of Contractor, such as failure to meet Substantial Completion or Final Acceptance of the Work within the time frames required by the Contract Documents, Owner reserves the right to withhold payment from Contractor at the hourly rates noted in Architect's Agreement with Owner.

1.3 CONTRACTOR'S PUNCH LIST AND TIME FOR COMPLETION

- A. General: Contractor's Punch List is a comprehensive list of observed items requiring completion or correction, prepared by each prime contractor for their Work.
- B. In an electronic format acceptable to Architect, (i.e. PlanGrid, Procore, Bluebeam, etc.), list a description of the item to be corrected, its location, the date and the subcontractor responsible for completing or correcting the item.
- C. Except for items whose completion is delayed under circumstances as determined acceptable solely by Architect, it is a requirement of Project that ALL Punch List items, from both Contractor's and Architect's Punch Lists, be completed or corrected by Contractor within 60 days of the date established by Architect for Substantial Completion.

1.4 SUBSTANTIAL COMPLETION

- A. Definition: Substantial Completion is the stage in the progress of the Work when the Work, or designated portion thereof of the Work, is sufficiently complete AND final cleaned in accordance with the requirements of the Contract Documents to permit Owner to occupy or utilize the area of work for its intended purpose and use.
- B. Preliminary Procedures: Before requesting inspection for a Certificate of Substantial Completion, complete all the following tasks. List ALL exceptions in writing, in the request.
1. On the Application for Payment that first follows the date Substantial Completion is claimed, show 100% complete for all portions of the work claimed as being substantially complete.
 - a. Include supporting documentation for completion as indicated in the Contract Documents, and a statement showing an accounting of changes to the Contract Sum.
 - b. If 100% completion cannot be shown, include a Punch List of incomplete items, the value of the incomplete construction, and reasons why the work is not complete.
 2. Advise Owner of pending insurance changeover requirements.
 3. Submit specific warranties, workmanship bonds, maintenance agreements, final certifications, and similar documents.
 4. Obtain and submit releases enabling Owner unrestricted use of the work, and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
 5. Submit Project Record Documents, Operation and Maintenance Manuals, damage or settlement surveys, property surveys and similar final record information.
 6. Deliver tools, spare parts, extra stock, and similar items to Owner.
 7. Make final changeover of permanent locks and transmit keys to Owner. Advise Owner's personnel of changeover in security provisions.
 8. Complete startup testing of systems and instruction and training to Owner's operation and maintenance personnel. Discontinue and remove temporary facilities from the site, along with mockups, construction tools, and similar elements.
 9. Complete final cleaning requirements, including touchup painting.
 10. Touch up and otherwise repair and restore marred, exposed finishes.
- C. Contractor's Punch List Requirements: When Contractor considers that the Work, or a portion thereof in accordance with the accepted Project Phasing Schedule, is substantially complete, and before Architect will inspect the Work or issue a Certificate of Substantial Completion, Contractor shall submit a Punch List for review of observed items requiring completion or correction prior to final payment. Failure to include an item does not alter the responsibility of Contractor to complete all Work in accordance with the requirements of the Contract Documents.
1. Owner reserves the right to withhold payment from Contractor to cover Architect's additional inspection costs, both direct and indirect, if Project is not defined as phased construction in the Contract Documents, and Contractor requests that a portion of Project be inspected by Architect to be deemed substantially complete.

- D. Inspection Procedures: Upon request by Contractor for inspection, and receipt of Contractor's Punch List, Architect will either proceed with the requested inspection to determine whether the Work or designated portion thereof is substantially complete, or advise Contractor of unfulfilled requirements. If Architect's inspection discloses any item, whether or not included on Contractor's Punch List, which is not sufficiently complete in accordance with the requirements of the Contract Documents to allow Owner to occupy or utilize the Work or designated portion thereof for its intended use, Contractor shall, before issuance of the Certificate of Substantial Completion by Architect, complete or correct such item.
1. Architect will prepare the Certificate of Substantial Completion following successful inspection, or advise Contractor of construction that must be completed or corrected before the certificate will be issued.
 2. Owner reserves the right to withhold payment from Contractor to cover Architect's additional inspection costs, both direct and indirect, if reinspection is necessary to assure Substantial Completion. Following successful reinspection, Architect will prepare a Certificate of Substantial Completion. If the Work is still not Substantially Complete, Architect will advise Contractor of its obligations that have not been fulfilled and which are still required for Substantial Completion.
 - a. If necessary, the reinspection will be repeated, with Owner reserving the same rights to withhold payment from Contractor to cover the Architect's reinspection costs.
 - b. Results of the completed inspection will form the basis of requirements for Final Acceptance.

1.5 FINAL ACCEPTANCE

- A. Preliminary Procedures: Before requesting final inspection and final payment, complete all the following tasks. List ALL exceptions in writing, in the request.
1. Submit the final payment request with releases and supporting documentation not previously submitted and accepted. Include insurance certificates for products and completed operations where required.
 2. Submit an updated final statement, accounting for final additional changes to the Contract Sum.
 3. Submit a copy of Contractor's Punch List of items to be completed or corrected, prepared at the time of Substantial Completion, endorsed, and dated by Contractor. This copy of Contractor's Punch List shall state that each item has been completed or otherwise resolved for acceptance.
 4. Submit consent of surety to final payment.
 5. Submit evidence of final, continuing insurance coverage complying with insurance requirements.
- B. Final Inspection Procedures: Upon receipt of the endorsed copy of Contractor's Punch List, and a written request by Contractor for final inspection, Architect will either proceed with the inspection, or advise Contractor of unfulfilled requirements.

1. Architect will either endorse and date the completed Contractor's Punch List following final inspection, or advise Contractor of construction that must be completed or corrected before Final Acceptance.
2. Owner reserves the right to withhold payment from Contractor to cover Architect's additional inspection costs, both direct and indirect, if reinspection is necessary to assure Final Acceptance of the Work. If the Work is still not finally complete, Architect will advise the Contractor of its obligations that have not been fulfilled and which are still required for Final Acceptance.
 - a. If necessary, the reinspection will be repeated, with Owner reserving the same rights to withhold payment from Contractor to cover the Architect's reinspection costs.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION

3.1 CLOSEOUT PROCEDURES

- A. Operation and Maintenance Instructions: Arrange for the Installer of each piece of equipment that requires regular maintenance to meet with Owner's personnel to provide instruction in the proper operation and maintenance of the installed equipment. Provide instruction by manufacturer's representatives if installers are not experienced in the operation and maintenance procedures. Include a detailed review of the following items:
 1. Maintenance manuals.
 2. Project record documents.
 3. Spare parts and materials.
 4. Tools.
 5. Lubricants.
 6. Fuels.
 7. Identification systems.
 8. Control sequences.
 9. Hazards.
 10. Cleaning.
 11. Warranties and bonds.
 12. Maintenance agreements and similar continuing commitments.
- B. As part of the instruction for operating equipment, demonstrate the following procedures:
 1. Startup.
 2. Shutdown.
 3. Emergency operations.
 4. Noise and vibration adjustments.
 5. Safety procedures.
 6. Economy and efficiency adjustments.
 7. Effective energy utilization.

END OF SECTION 017700

SECTION 017800 - FINAL CLEANING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for final cleaning at Substantial Completion.
- B. Related Sections: The following Sections contain requirements that relate to this Section:
 - 1. Division 1 Section "Temporary Facilities & Controls" specifies general cleanup and waste removal requirements.
 - 2. Division 1 Section "Contract Closeout" specifies general contract closeout requirements.
 - 3. Special cleaning requirements for specific construction elements are included in appropriate Divisions 2 through 33 Sections.
- C. Multiple Prime Contracts: Each prime contractor is responsible for final cleaning of their own Work. Contractor for General Construction is responsible for coordinating final cleaning of an area or piece of equipment where more than one prime contractor is involved.
- D. Environmental Requirements: Conduct cleaning and waste-disposal operations in compliance with local laws and ordinances. Comply fully with federal and local environmental and anti-pollution regulations.
 - 1. Do not dispose of volatile wastes such as mineral spirits, oil or paint thinners, in storm or sanitary drains.
 - 2. Burning or burying of debris, rubbish or other waste material on the premises is not permitted.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Cleaning Agents: Use cleaning materials and agents recommended by Manufacturer or Fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

PART 3 - EXECUTION

3.1 FINAL CLEANING

- A. General: Provide final-cleaning services. Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit of work to the condition expected from a commercial building cleaning and maintenance program. Comply with Manufacturer's instructions.
- B. Complete the following cleaning operations **before** requesting inspection for Substantial Completion for Project or a portion of Project.
1. Clean Project Site, yard and grounds in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter and foreign substances.
 2. Sweep paved areas broom clean. Rake grounds that are neither planted nor paved to a smooth, even-textured surface.
 3. Remove petrochemical spills, stains, and other foreign deposits.
 4. Remove tools, construction equipment, machinery and surplus material from the site.
 5. Remove snow and ice to provide safe access to the building.
 6. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition free of stains, films and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
 7. Remove debris and surface dust from limited access spaces including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics and similar spaces.
 8. Broom clean concrete floors in unoccupied spaces.
 9. Vacuum clean carpet and similar soft surfaces removing debris and excess nap. Shampoo, if required.
 10. Clean transparent materials, including mirrors and glass in doors and windows. Remove glazing compounds and other substances that are noticeable vision-obscuring materials. Replace chipped or broken glass and other damaged transparent materials. Polish mirrors and glass, taking care not to scratch surfaces.
 11. Remove all non-permanent labels.
 12. Touch up and otherwise repair and restore marred, exposed finishes and surfaces. Replace finishes and surfaces that cannot be satisfactorily repaired or restored or that already show evidence of repair or restoration.
 - a. Do not paint over "UL" and similar labels including mechanical and electrical nameplates.
 13. Wipe surfaces of mechanical and electrical equipment, elevator equipment, and similar equipment. Remove excess lubrication, paint and mortar droppings, and other foreign substances.
 14. Clean plumbing fixtures to a sanitary condition, free of stains, including stains resulting from water exposure.
 15. Replace disposable air filters and clean permanent air filters. Clean exposed surfaces of diffusers, registers and grills.
 16. Clean ducts, blowers and coils if units were operated without filters during construction.
 17. Clean food-service equipment to a sanitary condition, ready and acceptable for its intended use.
 18. Clean light fixtures, lamps, globes, and reflectors to function with full efficiency. Replace burned-out bulbs and defective components.

19. Leave Project clean and ready for occupancy.

- C. Pest Control: Engage an experienced, licensed exterminator to make a final inspection and rid Project of rodents, insects and other pests. Comply with regulations of local authorities.
- D. Removal of Protection: Remove temporary protection and facilities installed during construction to protect previously completed installations during the remainder of the construction period.
- E. Compliances: Comply with governing regulations and safety standards for cleaning operations. Remove waste materials from the site and dispose of lawfully.
 - 1. Where extra materials of value remain after completion of associated work, they become Owner's property. Dispose of these materials as directed by Owner.

END OF SECTION 017800

SECTION 017823 - OPERATION AND MAINTENANCE DATA

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for operation and maintenance manuals, including the following:
 - 1. Preparing and submitting operation and maintenance manuals for building operating systems and equipment.
 - 2. Preparing and submitting instruction manuals covering the care, preservation, and maintenance of architectural products and finishes.
 - 3. Instruction of Owner's operating personnel in the operation and maintenance of building systems and equipment.
- B. Related Sections: The following Sections contain requirements that relate to this Section:
 - 1. Division 1 Section "Submittals" specifies preparation of Shop Drawings and Product Data.
 - 2. Division 1 Section "Contract Closeout" specifies general closeout requirements.
 - 3. Appropriate Sections of Divisions 2 through 33 specify special operation and maintenance data requirements for specific pieces of equipment or building operating systems.
- C. Multiple Prime Contracts: Preparation of operation and maintenance manuals includes collecting material, collating and binding material and submitting data. Each prime contractor shall prepare operation and maintenance data for its own installations.
 - 1. Where operation and maintenance manuals include information on installations by Contractor for General Construction and another contractor, Contractor for General Construction shall prepare the manuals.
 - 2. Where operation and maintenance manuals include information on installations by more than one prime contractor, other than Contractor for General Construction, Contractor who is the principal source of information, as determined by Architect, shall receive information furnished by other contractors and prepare the manuals.
 - 3. Where instruction in operation and maintenance procedures on equipment and systems involves participation of more than one Contractor, Contractor designated by Architect as the principal instructor shall coordinate with the other contractors for a mutually agreeable time to provide instruction to Owner's operation and maintenance personnel.

1.3 QUALITY ASSURANCE

- A. Maintenance Manual Preparation: In preparation of maintenance manuals, use personnel thoroughly trained and experienced in operation and maintenance of the equipment or system involved.
 - 1. Where maintenance manuals require written instructions, use personnel skilled in technical writing where necessary for communication of essential data.
 - 2. Where maintenance manuals require drawings or diagrams, use draftsmen capable of preparing drawings clearly in an understandable format.
- B. Instructions for Owner's Personnel: Use experienced instructors thoroughly trained and experienced in operation and maintenance of equipment or system involved to instruct Owner's operation and maintenance personnel.

1.4 SUBMITTALS

- A. Submittal Schedule: Comply with the following schedule for submitting operation and maintenance manuals:
 - 1. **Before Substantial Completion**, when each installation that requires operation and maintenance manuals is nominally complete, submit two (2) draft copies of each manual to Architect for review. Include a complete index or table of contents of each manual.
 - a. Architect will return one (1) copy of the draft with comments within 15 days of receipt.
 - 2. Submit one (1) copy of data in final form **at least 15 days before final inspection**. Architect will return this copy within 15 days after final inspection, with comments.
 - 3. After final inspection, make corrections or modifications to comply with Architect's comments. Submit the specified number of copies of each approved manual to Architect **within 15 days of receipt of the Architect's comments**.
- B. Form of Submittal: Prepare operation and maintenance manuals in the form of an instructional manual for use by Owner's operating personnel. Organize into suitable sets of manageable size. Where possible, assemble instructions for similar equipment into a single binder.
 - 1. Binders: For each manual, provide heavy-duty, commercial-quality, 3-ring, vinyl-covered, loose-leaf binders, in thickness necessary to accommodate contents, sized to receive 8-1/2-by-11- inch paper. Provide a clear plastic sleeve on the spine to hold labels describing contents. Provide pockets in the covers to receive folded sheets.
 - a. Where two (2) or more binders are necessary to accommodate data, correlate data in each binder into related groupings according to the Project Manual table of contents. Cross-reference other binders where necessary to provide essential information for proper operation or maintenance of the piece of equipment or system.
 - b. Identify each binder on the front and the spine with the printed title "OPERATION AND MAINTENANCE MANUAL," Project title or name, and the subject matter covered. Indicate volume number for multiple volume sets of manuals.

2. Dividers: Provide heavy paper dividers with celluloid-covered tabs for each separate Section. Mark each tab to indicate contents. Provide a typed description of the product and major parts of equipment included in the Section on each divider.
3. Protective Plastic Jackets: Provide protective, transparent, plastic jackets designed to enclose diagnostic software for computerized electronic equipment.
4. Text Material: Where maintenance manuals require written material, use the manufacturer's standard printed material. If manufacturer's standard printed material is not available, provide specially prepared data, neatly typewritten, on 8-1/2-by-11-inch white bond paper.
5. Drawings: Where maintenance manuals require drawings or diagrams, provide reinforced, punched binder tabs on drawings and bind in with text.
 - a. Where oversize drawings are necessary, fold drawings to the same size as text pages and use as a foldout.
 - b. If drawings are too large to be used practically as a foldout, place the drawings, neatly folded, in front or rear pocket of binder. Insert a typewritten page indicating drawing title, description of contents and drawing location at the appropriate location in the manual.

1.5 MANUAL CONTENT

- A. In each manual, include information specified in the individual Specification Section and the following information for each major component of building equipment and its controls:
 1. General system or equipment description
 2. Design factors and assumptions
 3. Copies of applicable Shop Drawings and Product Data
 4. System or equipment identification, including:
 - a. Name of manufacturer
 - b. Model number
 - c. Serial number of each component
 5. Operating instructions
 6. Emergency instructions
 7. Wiring diagrams
 8. Inspection and test procedures
 9. Maintenance procedures and schedules
 10. Precautions against improper use and maintenance
 11. Copies of warranties
 12. Repair instructions including spare parts listing
 13. Sources of required maintenance materials and related services
 14. Manual index
- B. Organize each manual into separate Sections for each piece of related equipment. As a minimum, each manual shall contain a title page; a table of contents; copies of Product Data, supplemented by Drawings and written text and copies of each warranty, bond and service contract issued.

1. Title Page: Provide a title page in a transparent, plastic envelope as the first sheet of each manual. Provide the following information:
 - a. Subject matter covered by the manual
 - b. Name and address of Project
 - c. Date of submittal
 - d. Name, address, and telephone number of Contractor
 - e. Name and address of Architect
 - f. Cross-reference to related systems in other operation and maintenance manuals
2. Table of Contents: After the title page, include a typewritten table of contents for each volume, arranged systematically according to the Project Manual format. Include a list of each product included, identified by product name or other appropriate identifying symbol and indexed to the content of the volume.
 - a. Where a system requires more than one volume to accommodate data, provide a comprehensive table of contents for all volumes in each volume of the set.
3. General Information: Provide a General Information section immediately following the table of contents listing each product included in the manual, identified by product name. Under each product, list the name, address, and telephone number of the subcontractor or installer and the maintenance contractor. Clearly delineate the extent of responsibility of each of these entities. Include a local source for replacement parts and equipment.
4. Product Data: Where the manuals include manufacturer's standard printed data, include only sheets that are pertinent to the part or product installed. Mark each sheet to identify each part or product included in the installation. Where Project includes more than one item in a tabular format, identify each item, using appropriate references from the Contract Documents. Identify data that is applicable to the installation, and delete references to information that is not applicable.
5. Written Text: Prepare written text to provide necessary information where manufacturer's standard printed data is not available, and the information is necessary for proper operation and maintenance of equipment or systems. Prepare written text where it is necessary to provide additional information or to supplement data included in the manual. Organize text in a consistent format under separate headings for different procedures. Where necessary, provide a logical sequence of instruction for each operation or maintenance procedure.
6. Drawings: Provide specially prepared drawings where necessary to supplement manufacturer's printed data to illustrate the relationship of component parts of equipment or systems or to provide control or flow diagrams. Coordinate these drawings with information contained in project record drawings to assure correct illustration of the completed installation.
 - a. Do not use original project record documents as part of operation and maintenance manuals.
7. Warranties, Bonds, and Service Contracts: Provide a copy of each warranty, bond, or service contract in the appropriate manual for the information of Owner's operating personnel. Provide written data outlining procedures to follow in the event of product

failure. List circumstances and conditions that would affect validity of the warranty or bond.

1.6 MATERIAL AND FINISHES MAINTENANCE MANUAL

- A. Submit three (3) copies of each manual, in final form, on materials and finishes to Architect for distribution. Provide one section for architectural products, including applied materials and finishes. Provide a second section for products designed for moisture protection and products exposed to the weather.
 - 1. Refer to individual Specification Sections for additional requirements on the care and maintenance of materials and finishes.
- B. Architectural Products: Provide manufacturer's data and instructions on the care and maintenance of architectural products, including applied materials and finishes.
 - 1. Manufacturer's Data: Provide complete information on architectural products, including the following, as applicable:
 - a. Manufacturer's catalog number
 - b. Size
 - c. Material composition
 - d. Color
 - e. Texture
 - f. Reordering information for specially manufactured products
 - 2. Care and Maintenance Instructions: Provide information on the care and maintenance, including manufacturer's recommendations for types of cleaning agents to be used and methods of cleaning. Provide information on cleaning agents and methods that could prove detrimental to the product. Include the manufacturer's recommended schedule for cleaning and maintenance.
- C. Moisture Protection and Products Exposed to Weather: Provide complete manufacturer's data with instructions on inspection, maintenance and repair of products exposed to the weather or designed for moisture-protection purposes.
 - 1. Manufacturer's Data: Provide manufacturer's data giving detailed information, including the following, as applicable:
 - a. Applicable standards
 - b. Chemical composition
 - c. Installation details
 - d. Inspection procedures
 - e. Maintenance information
 - f. Repair procedures
- D. Schedule: Provide complete information in the materials and finishes manual on products specified in the following Sections:
 - 1. Face Brick and Masonry: Division 4 Section "Unit Masonry Assemblies"

2. EPDM Sheet Roofing: Division 7 Section "Single-Ply Membrane Roofing"
3. Metal Wall Panels: Division 7 Section "Metal Wall Panels"
4. Finish Hardware: Division 8 Section "Door Hardware"
5. Carpet: Division 9 Section "Carpet"
6. Ceramic Tile: Division 9 Section "Tiling"

1.7 EQUIPMENT AND SYSTEMS MAINTENANCE MANUAL

- A. Submit six (6) copies of each manual, in final form, on equipment and systems to Architect for distribution. Provide separate manuals for each unit of equipment, each operating system and each electric and electronic system.
 1. Refer to individual Specification Sections for additional requirements on the operation and maintenance of the various pieces of equipment and operating systems.
- B. Equipment and Systems: Provide the following information for each piece of equipment, each building operating system and each electric or electronic system.
 1. Description: Provide a complete description of each unit and related component parts, including the following:
 - a. Equipment or system function
 - b. Operating characteristics
 - c. Limiting conditions
 - d. Performance curves
 - e. Engineering data and tests
 - f. Complete nomenclature and number of replacement parts
 2. Manufacturer's Information: For each manufacturer of a component part or piece of equipment, provide the following:
 - a. Printed operation and maintenance instructions
 - b. Assembly drawings and diagrams required for maintenance
 - c. List of items recommended to be stocked as spare parts
 3. Maintenance Procedures: Provide information detailing essential maintenance procedures, including the following:
 - a. Routine operations
 - b. Troubleshooting guide
 - c. Disassembly, repair, and reassembly
 - d. Alignment, adjusting, and checking
 4. Operating Procedures: Provide information on equipment and system operating procedures, including the following:
 - a. Startup procedures
 - b. Equipment or system break-in
 - c. Routine and normal operating instructions

- d. Regulation and control procedures
 - e. Instructions on stopping
 - f. Shutdown and emergency instructions
 - g. Summer and winter operating instructions
 - h. Required sequences for electric or electronic systems
 - i. Special operating instructions
5. Servicing Schedule: Provide a schedule of routine servicing and lubrication requirements, including a list of required lubricants for equipment with moving parts.
 6. Controls: Provide a description of the sequence of operation and as-installed control diagrams by the control manufacturer for systems requiring controls.
 7. Coordination Drawings: Provide each Contractor's Coordination Drawings.
 - a. Provide as-installed, color-coded, piping diagrams, where required for identification.
 8. Valve Tags: Provide charts of valve-tag numbers, with the location and function of each valve.
 9. Circuit Directories: For electric and electronic systems, provide complete circuit directories of panelboards, including the following:
 - a. Electric service
 - b. Controls
 - c. Communication

1.8 INSTRUCTIONS FOR THE OWNER'S PERSONNEL

- A. **Prior to final inspection**, instruct Owner's personnel in the operation, adjustment, and maintenance of products, equipment and systems. Provide instruction at mutually agreed upon times.
 1. For equipment that requires seasonal operation, provide similar instruction during other seasons.
 2. Use the operation and maintenance manuals for each piece of equipment or system as the basis of instruction. Review the contents in detail to explain all aspects of operation and maintenance.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

END OF SECTION 017823

SECTION 017900 - WARRANTIES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for warranties required by the Contract Documents, including Manufacturer's standard warranties on Products and special warranties.

- 1. Refer to the General Conditions of the Contract for Construction for terms of Contractor's period for correction of the Work.

- B. Related Sections: The following Sections contain requirements that relate to this Section:

- 1. Division 1 Section "Submittals" specifies procedures for submitting warranties.
 - 2. Division 1 Section "Contract Closeout" specifies contract closeout procedures.
 - 3. Divisions 2 through 33 Sections for specific requirements for Warranties and Special Warranties on Products and installations specified to be warranted.
 - 4. Certifications and other commitments and agreements for continuing services to Owner are specified elsewhere in the Contract Documents.

- C. Disclaimers and Limitations: Manufacturer's disclaimers and limitations on product warranties do not relieve 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 Contractor.

- D. Separate Prime Contracts: Each prime contractor is responsible for warranties related to its own contract.

1.3 DEFINITIONS

- A. Standard product warranties are preprinted written warranties published by individual manufacturers for particular products and are specifically endorsed by the Manufacturer to Owner.
- B. Special Warranties are written warranties required by or incorporated in the Contract Documents, either to extend time limits provided by standard warranties or to provide greater rights for Owner.

1.4 WARRANTY REQUIREMENTS

- A. Related Damages and Losses: When correcting failed or damaged warranted construction, remove and replace construction that has been damaged as a result of such failure or must be removed and replaced to provide access for correction of warranted construction.
- B. Reinstatement of Warranty: When work covered by a Warranty has failed and been corrected by replacement or rebuilding, reinstate the Warranty by written endorsement. The reinstated Warranty shall be equal to the original Warranty with an equitable adjustment for depreciation.
- C. Replacement Cost: Upon determination that work covered by a Warranty has failed, replace or rebuild the work to an acceptable condition complying with the requirements of the Contract Documents. Contractor is responsible for the cost of replacing or rebuilding defective Work regardless of whether Owner has benefited from use of the Work through a portion of its anticipated useful service life.
- D. Owner's Recourse: Expressed warranties made to Owner are in addition to implied warranties and shall not limit the duties, obligations, rights, and remedies otherwise available under the law. Expressed warranty periods shall not be interpreted as limitations on the time in which Owner can enforce such other duties, obligations, rights, or remedies.
 - 1. Rejection of Warranties: Owner reserves the right to reject warranties and to limit selection to products with warranties not in conflict with the requirements of the Contract Documents.
- E. Where the Contract Documents require a Special Warranty or similar commitment on the Work or part of the Work, Owner reserves the right to refuse to accept the Work until Contractor presents evidence that entities required to countersign such commitments are willing to do so.

1.5 SUBMITTALS

- A. Submit written warranties to Architect prior to the date certified for Substantial Completion. If Architect's Certificate of Substantial Completion designates a commencement date for warranties other than the date of Substantial Completion of the Work, or a designated portion of the Work, submit written warranties upon request of Architect.
 - 1. When a designated portion of the Work is completed and occupied or used by Owner, by separate agreement with Contractor during the construction period, submit properly executed warranties to Architect within 15 days of completion of that designated portion of the Work.
- B. When the Contract Documents require Contractor, or Contractor and a subcontractor, Supplier or Manufacturer 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 Owner, through Architect, for approval prior to final execution.
- C. Form of Submittal: At Final Completion compile two (2) copies of each required Warranty properly executed by Contractor, or by Contractor, Subcontractor, Supplier or Manufacturer.

Organize the warranty documents into an orderly sequence based on the table of contents of the Project Manual.

- D. Bind warranties and bonds in heavy-duty, durable 3-ring, vinyl-covered loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2 by 11-inch paper.
1. Provide heavy paper dividers with celluloid covered tabs for each separate Warranty. Mark the tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product, and the name, address, and telephone number of the Installer.
 2. Identify each binder on the front and spine with the typed or printed title "WARRANTIES," Project title or name and the name of Contractor.
 3. When warranted construction requires operation and maintenance manuals, provide additional copies of each required warranty, as necessary, for inclusion in each required manual.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

END OF SECTION 017900

