ROOFING REPLACEMENT
for
FUNKSTOWN ELEMENTARY SCHOOL
23 Funkstown Road
Hagerstown, MD 21740

(PSC # 21.051.17)
WCPS Bid No. 2017-11
BFM No. 16053

OWNER
WASHINGTON COUNTY PUBLIC SCHOOLS
10435 Downsville Pike
Hagerstown, Maryland 21740

Board of Education of Washington County
Melissa A. Williams, President
Stan Stouffer, Vice President
    Pieter Bickford
    Jacqueline B. Fisher
    Michael Guessford
    Karen Harshman
    Wayne D. Ridenour
    Erica Lee Greenwald
    Student Representative

WASHINGTON COUNTY SUPERINTENDENT OF SCHOOLS
CLAYTON M. WILCOX, Ed. D.

STATE SUPERINTENDENT OF SCHOOLS
KAREN B. SALMON, Ph. D.

Bid Opening: February 8, 2017 at 2:00 pm

Issued: January 18, 2017
WASHINGTON COUNTY PUBLIC SCHOOLS
ROOF REPLACEMENT PROJECT
for
FUNKSTOWN ELEMENTARY SCHOOL
PSC #21.051.17
BFM PROJECT NO. 16053

SPECIFICATION INDEX

DIVISION 0 – CONDITIONS OF THE CONTRACT (Provided by WCPS)
Section 00 11 13  Project Overview
Appendix A – Construction Sign
Section 00 11 16  Invitation to Bidders
Section 00 20 00  Standard Form of Proposal
Section 00 20 50  WCPS Bid/Proposal Affidavit
Section 00 20 60  No Bid Reply Form
Section 00 21 13  AIA Document A701-1997 Instructions to Bidders as amended by
Washington County Board of Education
Section 00 43 13  AIA Document A310 – 2010 Bid Bond
Section 00 43 39  Minority Business Enterprise (MBE) Procedures
Section 00 43 43  DLLR Wage Rate Requirements
Section 00 52 13  AIA Document A101 – 2007 Standard Form of Agreement Between Owner
and Contractor, as amended by Washington County Board of Education
Section 00 52 14  WCPS Contract Affidavit
Section 00 61 13.13  AIA Document A312 – 2010 Performance Bond
Section 00 61 13.16  AIA Document A312 – 2010 Payment Bond
Section 00 62 76  AIA Document G702 and AIA G703 – 1992 Application and Certificate
for Payment and Continuation Sheet
Section 00 65 16  AIA Document G704 – 2000 Certificate of Substantial Completion
Section 00 72 13  AIA Document A201 – 1997 General Conditions of the Contract for
Construction, unedited
Section 00 72 14  Washington County Board of Education Supplement to the General
Conditions of the Contract for Construction A201-1997

DIVISION 1 - GENERAL REQUIREMENTS
Section 01 01 00 - Summary of Work 01 01 00-1 – 01 01 00-9
Section 01 01 90 - Contract Considerations 01 01 90-1
Section 01 02 70 - Applications for Payment 01 02 70-1 – 01 02 70-2
Section 01 02 80 - Change Order Procedures 01 02 80-1 – 01 02 80-4
Section 01 03 90 - Coordination and Meetings 01 03 90-1 – 01 03 90-3
Section 01 04 10 - Project Coordination 01 04 10-1 – 01 04 10-2
Section 01 20 00 - Price and Payment Procedures 01 20 00-1 – 01 20 00-5
Section 01 30 00 - Submittals 01 30 00-1 – 01 30 00-3
Section 01 40 00 - Quality Requirements 01 40 00-1 – 01 40 00-4
Section 01 50 00 - Construction Facilities & Temporary Controls 01 50 00-1 – 01 50 00-7
Section 01 60 00 - Material and Equipment 01 60 00-1 – 01 60 00-4
Section 01 70 00 - Contract Closeout 01 70 00-1 – 01 70 00-2
Section 01 74 00 - Warranties and Bonds 01 74 00-1 – 01 74 00-2
DIVISION 2 – SITE WORK
Section 02 22 50 - Demolition 02 22 50-1 – 02 22 50-4

DIVISION 3 – CONCRETE
Section 03 51 10 - Cementitious Wood Fiber Decking 03 51 10-1 – 03 51 10-2

DIVISION 4 – MASONRY
Section 04 90 00 - Masonry Restoration and Cleaning 04 90 00-1 – 04 90 00-9

DIVISION 5 - METALS
Section 05 50 00 - Metal Fabrications 05 50 00-1 – 05 50 00-8

DIVISION 6 - WOOD AND PLASTIC
Section 06 11 40 - Wood Blocking and Curbing 06 11 40-1 – 06 11 40-5

DIVISION 7 - THERMAL AND MOISTURE CONTROL
Section 07 09 10 - Preparation for Re-Roofing 07 09 10-1 – 07 09 10-4
Section 07 22 20 - Roof and Deck Insulation 07 22 20-1 – 07 22 20-7
Section 07 41 00 - Metal Wall Panels 07 41 00-1 – 07 41 00-4
Section 07 52 20 - Hybrid Composite Built-Up Asphalt Roofing 07 52 20-1 – 07 52 20-11
Section 07 54 10 - Thermoplastic Membrane Roofing 07 54 10-1 – 07 54 10-14
Section 07 62 00 - Sheet Metal Flashing and Trim 07 62 00-1 – 07 62 00-9
Section 07 90 00 - Joint Sealers 07 90 00-1 – 07 90 00-6

DIVISION 9 – FINISHES
Section 09 90 00 - Paints and Coatings 09 90 00-1 – 09 90 00-4

DIVISION 15 – MECHANICALS
Section 15 01 10 - Mechanical/Electrical General Requirements 15 01 10-1 – 15 01 10-2
Section 15 16 00 - Roof Drains 15 16 00-1 – 15 16 00-3

DRAWING INDEX
CS - Cover Sheet
A1.1 - Roof Plan
A1.2 - Single Ply Roof Details
A1.3 - Single Ply Roof Details
A1.4 - BUR Details
A1.5 - BUR Details
A1.6 - Roof Details and Notes
SECTION 00 11 13
PROJECT OVERVIEW
PART 1 - GENERAL

1.1 RELATED DOCUMENTS
Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 0 and Division 1 Specification Sections, apply to the Work of this Section.

1.2 SUMMARY
This Section includes the following:

1. Project Information
2. Schedule
3. Prevailing Wage
4. Minority Business Enterprise
5. Contractor Responsibilities
6. State Sign
8. Cleaning and Protecting
9. Use of Premises and Temporary Facilities
10. Owner's Occupancy Requirements
11. Work Restrictions
12. Specification Formats and Conventions
13. Work Scope

1.3 PROJECT INFORMATION

A. Roof Replacement at Funkstown Elementary School

B. Location: Funkstown Elementary School
   23 Funkstown Road
   Hagerstown, MD 21740

C. Owner: Washington County Public Schools
   10435 Downsville Pike
   Hagerstown, Maryland 21740

   Architect: Bushey Feight Morin Architects
   473 North Potomac Street
   Hagerstown, MD 21740

D. Bid Number: 2017-11

E. PSC Number: 21.051.17 SR
F. Project Description:
   The Funkstown Elementary School is receiving a new single-ply or built-up roof as part of WCPS Bid #2017-11. Improvements to Funkstown Elementary School via the project are generally limited to exterior work, roof drain plumbing, and includes all or most of the following aspects:

   Selective demolition – Project includes removal of the existing roof system including membrane, ballast, metal edge flashing and gravel stops.

   Hazardous Materials – At Funkstown Elementary School, there are no records of any outstanding roofing material that is an Asbestos Containing Material.

   Roofing – The project requires complete removal and replacement of built-up roof system with new single ply system as base bid or with an SBS BUR system per alternate including perimeter and penetration flashings, sheet metal flashing and trims, expansion joints, etc. Some repair or replacement of the roof decking may be required.

   Plumbing – The project does require the replacement of existing, and/or the installation of new roof drains.

   Mechanical – The project may require retrofit of existing mechanical equipment (i.e. RTU’s, exhaust fans, etc.) and associated ductwork. Where applicable, this will include removal and on-site storage of units by crane, removal and disposal of steel dunnage and curb adapters, replacement of such with new curbs, and re-installation/re-connection of mechanical equipment. Two new mechanical curbs and pitch pockets to be set for HVAC project by separator contract.

   Structural – Some structural steel, miscellaneous metal work, and/or applicable skylight modifications, may be included in the proposed scope of work shown in the contract documents.

   Electrical – The project may require retrofit of existing electrical wiring above the roof.

No site work or utility work is included. Masonry work indicated for re-pointing brick wall areas above the roof line.

1.4 SCHEDULE

   A. The Contract Award is anticipated to occur on **February 21, 2017** and the “Notice of Award” letter will be issued immediately.

   B. The Contractor shall provide all required submittals to the Owner and Architect within thirty (30) days after the “Notice of Award” is issued, or sooner if necessary to avoid delay of work.

   C. The field work is to occur when school is not in session during Summer 2017. The tentative last day of school is **June 9, 2017**, pending weather days. The Field Start Date shall be two (2) business days after the last day of school.

   D. **The Total Project Substantial Completion Date is August 11, 2017.** The Contractor is responsible for obtaining the Certificate of Occupancy from the Washington County Division of Engineering & Construction Management on or before the Substantial Completion Date. The Final Project Completion Date is September 1, 2017.

   E. The Contractor shall order materials as soon as submittals are approved by the Architect so that the materials are in possession upon commencement of field work. If any materials can be delivered prior to the last day of school, the Contractor is responsible for proper **offsite** storage.
F. The Contractor shall prepare and submit for the Owner’s and Architect’s approval a detailed Work Plan and Construction Schedule for the Work within ten (10) days after the “Notice of Award” is issued.

G. Contractor shall maintain at all times sufficient manpower levels to meet scheduling requirements and avoid delay to completion of work.

H. Liquidated Damages:

1. Total Project: Should the Work not be performed on or before the times stated, there will be deducted from the Contract Balance the sum of one thousand dollars ($1,000.00) per consecutive calendar days, as Liquidated Damages, but not as a penalty, for each day’s delay after expiration of such period, and until final completion of the Work and its acceptance by the Owner. Plus the contractor will be held responsible for additional extended general conditions, consumables, and direct labor costs to the Third Party Inspectors and the Architect for work and re-inspections required until the “Contract Work” is determined to be acceptable by the Owner.

2. Completion of Punchlist Items: Should the Contractor fail to correct punchlist items within the 15 day period (beginning the date of the receipt of the list) there will be deducted from the Contract Balance the sum of fifty dollars ($50.00) per item per consecutive calendar days, as Liquidated Damages, but not as a penalty, for each day’s delay after expiration of such period, and until final completion of the Work and its acceptance by the Owner.

1.5 PREVAILING WAGE

This construction project is being re-bid both with Prevailing Wage Rates AND without Prevailing Wage Rates. If the prevailing wage rates are selected, the construction project will be subject to paying Prevailing Wage Rates in accordance with the State of Maryland Department of Labor, Licensing and Regulation (DLLR). The applicable wage rate determination by DLLR is included in Specification Section “00 43 43 – DLLR Wage Rate Requirements.” Please remind any outsourced bidder that compliance with DLLR regulations are their responsibility to verify prior to submitting a bid.

1.6 MINORITY BUSINESS ENTERPRISE

A. This bid /project is subject to Minority Business Enterprise Procedures for State Funded Public School Construction Projects. Certified Minority Business Enterprises are encouraged to respond to this solicitation notice.

B. The contractor or supplier who provides materials, supplies, equipment and/or services for this construction project shall achieve the specific MBE goals established for this project:

   Overall goal of eighteen percent (19%) with a sub-goal of seven percent (7%) for African American-owned businesses and a sub-goal of four percent (4%) for Asian American-owned businesses.

   All prime contractors, including certified MBE firms, when submitting bids as general or prime contractors, are required to attempt to achieve this goal from certified MBE firms.

C. The bidder is required to submit with its bid a completed Attachment A – Certified MBE Utilization and Fair Solicitation Affidavit and Attachment B – MBE Participation Schedule, as described in the bid solicitation documents.
D. Refer to Specification Section “00 43 39 – MBE Procedures” for further details.

E. Notice to Bidders: In accordance with COMAR, a new MBE liquidated damages provision has been added to the AIA Document A101 – 2007 Standard Form of Agreement Between Owner and Contractor, as amended by Washington County Board of Education (Article 8.7 in Specification Section 00 52 13).

1.7 CONTRACTOR RESPONSIBILITIES includes but is not limited to the following:

A. Provide Shop Drawings, Product Data, Samples, As-Built Drawings, Maintenance Manuals, and Warranties of all work under this Contract.

B. Receive and unload products at site. Inspect for completeness and damage. Repair or replace items damaged after receipt.

C. Handle, store, install and finish products.

D. Pay legally required sales, consumer and use taxes.

E. When it is necessary to modify or interrupt existing utility service, the Contractor shall notify the Owner a minimum of 14 days prior to the planned work. Obtain the Owner’s written approval.

F. All Labor, Materials, Equipment, and Other facilities and services necessary for proper execution and completion of work. This includes but is not limited to multiple mobilizations and any escalation in material and fuel costs throughout the duration of the project.

G. Perform all work to comply with the rules and the regulations of the governing bodies and state and local laws. Provide all necessary permits, fees, and coordinate all inspections from applicable agencies that may be required. Provide all permits and inspection certificates to the Owner for their records.

H. Owner will obtain the general building permit for this project. The Contractor shall obtain and pay for all other permits and inspections as required to successfully complete the execution of this Work.

I. The Owner will permit use of permanent utilities during construction. Contractor shall take steps to conserve energy and utility usage. Any expansion of services needed on a temporary basis shall be arranged for, installed, and un-installed upon completion by the Contractor such as a 220 v branch line for equipment operation.

J. Field Engineering:
   1. Contractor shall be solely responsible for properly laying out the work and for all lines and measurements for all of the work executed under the Contract Documents.
   2. All dimensions and grades shown on Drawings are believed to be correct, but the Contractor shall verify them at the site and notify the Owner and Architect in writing of any discrepancies found before proceeding with the work. In the absence of such notifications, extra work caused by discrepancies shall not entitle Contractor’s to additional compensation.
   3. Working from lines and levels established by property survey, and as shown in relation to the work. Calculate and measure required dimensions as shown (within recognized tolerances if not otherwise indicated); do not scale drawings to determine dimensions. Contractor shall be solely responsible for the proper location and level of all the work and for the maintenance of the reference lines and bench marks.
K. Work by Others:
   1. The Owner will maintain use of its school building located on the premises.
   2. The Owner will maintain the right to have additional trade contractors, at its discretion,
      working on site during the course of the project.

1.8 STATE SIGN

A. The Contractor shall provide one sign of construction, design, and content shown on the drawing
   included at the end of this section as EXHIBIT A. Background color shall be white, text shall be
   black, accent bands shall be yellow, and flag shall be red, yellow and black with white
   background. The lettering shall be Series C of Standard Alphabet for Highway Signs, Public
   Roads Administration, Federal Works Agency.

C. To obtain this construction sign that is compliant with the State of Maryland IAC Administrative
   Procedures Guide standard requirements, contact:
      Sign Shop
      Maryland Correctional Enterprises (MCE)
      Email: cwbehnke@dpscs.state.md.us
      Phone: 410-799-5102
      Fax: 410-799-7911

D. Sign location shall be approved by the Owner and Architect.

E. No other signs are allowed without Owner permission except those required by law.

F. Submit shop drawing indicating content, layout, lettering, color, foundation, structure, sizes, and
   grades of members.

G. Sign Materials:
   2. Sign Surfaces: Exterior grade plywood with medium density overlay, minimum 3/4 inches
      thick, standard large sizes to minimize joints.
   3. Rough Hardware: Galvanized or brass.
   4. Paint and Primers: Exterior quality, two coats; sign background of color as selected.
      Adequate to withstand weathering, fading, and chipping for duration of construction
   5. Contractor shall design sign and structure to withstand 60 miles/hr wind velocity.

H. Installation:
   1. Install project identification sign within 14 days after receipt of Notice to Proceed.
   2. Erect at designated location with high public visibility adjacent to main entrance to site.
   3. Erect supports and framing on secure foundation, rigidly braced and framed to resist wind
      loadings.
   4. Install sign surface plumb and level, with butt joints. Anchor securely.
   5. Paint exposed surfaces of sign, supports, and framing.

I. Maintenance: Maintain signs and supports clean, repair deterioration and damage.

J. Removal: When directed, remove signs, framing, supports, and foundations at completion of
   project and restore area.

1.9 GENERAL INSTALLATION PROVISIONS

A. Installer's Inspection of Conditions: Each Installer is required to inspect substrate to receive
   work, and conditions under which work will be performed, and to report, in writing to the Owner
   and the Architect, unsatisfactory conditions.
B. Manufacturer's Instructions: Where installations include manufactured products, comply with manufacturer's applicable instructions and recommendations for installation when they are more explicit or more stringent than the requirements indicated in Contract Documents.

C. Inspect each item of material or equipment immediately prior to installation, and reject damaged and defective items.

D. Provide attachment and connection devices and methods for securing work properly as it is installed; true to line and level, and within recognized industry tolerances if not otherwise indicated. Allow for expansions and movements. Provide uniform joint widths in exposed work, organized for best possible visual effect. Refer questionable visual-effect choices to the Architect for final decision.

E. Recheck measurements and dimensions of the work, as an integral step of starting each installation.

F. Install work during conditions of temperature, humidity, exposure, forecasted weather, and status of project completion which will ensure best possible results for each unit of work, in coordination with entire work.

G. Concealed Work: Coordinate enclosure of work, with the Owner and the Architect and with required inspections and tests, so as to minimize necessity of uncovering work for that purpose. Record exact locations of utility work on Record Drawings.

H. Mounting Heights: Where mounting heights are not indicated, mount individual units of work at industry-recognized standard mounting heights, or at heights specified by applicable codes, for applications indicated. Refer questionable mounting height choices to the Owner and Architect for final decision.

I. Enclose and conceal from view rain water piping where additional roof drains are added or other utility lines in habitable rooms and spaces, unless otherwise shown or specified.

J. Where not otherwise shown, match adjacent masonry, gypsum board or other finish construction to form an enclosing chase with prior approval by Owner and Architect.

K. Coordinate any above ceiling obstructions for any new piping above ceiling or below to the point of connection or tie-in.

L. Coordination: Do not fabricate or install piping and other items above ceilings, within walls or under floors until the coordination process has verified that there will be no interference and that the space for construction materials, equipment, fixtures and finishes specified by the design requirements can be maintained. Prior to fabrication and installation, promptly report to the Owner and Architect apparent interference or difficulties anticipated.

1.10 CLEANING AND PROTECTION:

A. During handling and installation of work at project site, clean and protect work in progress and adjoining work on a basis of perpetual maintenance. Apply suitable protective covering on newly installed work where reasonably required to ensure work is free from damage or deterioration at time of substantial completion; otherwise, clean and perform maintenance on newly installed work as frequently as necessary through remainder of construction period.
B. Limiting Exposure of Work: To extent possible through reasonable control and protection methods, supervise performance of work in a manner and by means which will ensure that none of the work, whether completed or in progress, will be subjected to harmful, dangerous, damaging, or otherwise deleterious exposures during construction period. Such exposures include where applicable (but not by way of limitation) static loading, dynamic loading, internal pressures, external pressures, high or low temperatures, thermal shock, high or low humidity, air contamination or pollution, water, ice, solvents, chemicals, light, radiation, puncture, abrasion, heavy traffic, soiling, bacteria, insect infestation, combustion, electrical current, high speed operation, improper lubrication, unusual wear, misuse, incompatible interface, destructive testing, misalignment, excessive weathering, unprotected storage, improper shipping/handling, theft and vandalism.

C. Construct work in accordance with project schedule; coordinate the schedule and operations with the Owner.

1.11 USE OF PREMISES AND TEMPORARY FACILITIES

A. General: During the construction period, the Contractor shall have limited use of the premises. Use of any areas other than those in which work is done is prohibited.

B. Use of Site: Confine construction operations to areas within the limits indicated on the Contract Documents. Do not disturb the building and property beyond areas in which the Work is indicated.

C. Owner Occupancy: Allow for Owner occupancy of facility and use by the Public during the entire construction period for the portions of the facility not being disturbed by construction. Maintain code compliant egress in Owner occupied spaces.

D. Contractor has access to schools' water supply for use during construction.

E. Temporary toilet facilities are required, Contractor shall not use permanent facilities within the building.

F. Contractor use of the school's phone or internet services is not permitted.

G. Parking: During construction operations, contractor parking is limited to the discretion of the Owner.

H. Contractor field office trailer(s) will not be permitted on school property for this project.

I. Driveways and Entrances: Keep driveways, loading areas, and entrances serving the premises clear and available to Owner, Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or storage of materials without obtaining prior written authorization from the Owner.

1. Schedule and coordinate deliveries to minimize use of driveways and entrances.

2. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.

3. Lay down and staging areas will be established jointly by the Contractor and the Owner within the Construction Limits of Disturbance.
1.12 OWNER’S OCCUPANCY REQUIREMENTS

A. Full Owner Occupancy: Owner will occupy the building and property for the duration of the project. Cooperate with the Owner during the construction operations to minimize conflicts and facilitate Owner and Public usage. Perform the Work so as not to interfere with the Public and the Owner’s day-to-day operations. Maintain existing entrances and exits. Provide not less than 14 days’ notice to the Owner of activities that will affect the Public and the Owner's operations.

B. Occupancy of Completed Areas of Construction: Owner reserves the right to occupy and to place and install equipment in completed areas before Substantial Completion, provided such occupancy does not interfere with completion of the Work. Such placement of equipment and partial occupancy shall not constitute acceptance of the total Work.

1. The Architect will prepare a Punchlist for each specific portion or area(s) of the Work to be occupied before Owner occupancy.

2. The Contractor is to obtain approval from Authorities Having Jurisdiction before Owner occupancy of completed spaces.

3. Prior to Owner occupancy, all work shall be fully operational, and required tests and inspections shall be successfully completed. Upon completion of the project, the Owner and Architect will issue a Certificate of Substantial Completion indicating acceptance.

4. Upon Project Substantial Completion, Owner will assume responsibility for maintenance and custodial service for occupied portions of work.

1.13 WORK RESTRICTIONS

A. Washington County Public Schools operates on a 10-hour day, 4-day work week during the summer, so Funkstown Elementary School is closed on Fridays during the summer. Therefore, the Contractor’s normal working hours during the summer are Monday through Thursday when the school is open. If the Contractor chooses to work evenings and/or on a Friday, Saturday, or Sunday when schools are closed, the Contractor must request written approval from WCPS at least four (4) days in advance of needing access to the school and must pay the $25.00 per hour rate at a minimum of four (4) hours for custodial coverage on these days. Work requiring inspections cannot be completed on the weekend.

B. Contractor shall prioritize the safety of students and staff while working in the occupied building and shall take all necessary precautions to protect the wellbeing of all occupants at all times.

C. The Contractor is responsible for conducting construction activities so as to minimize impact to spaces outside of the project area and so as to avoid any disruption to school activities.

D. All work to comply with the Noise Restrictions of the local governing authority.

E. All workers on site are to wear hardhats, clean clothes (shirts & pants – no shorts), protective eyeglasses and protective footwear, and visible identification badges displayed at all times. The Contractor is responsible for providing identification badges for all workers.

F. Do not interrupt existing utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary utility services according to requirements indicated:
1. Notify the Owner not less than 14 days in advance of proposed utility interruptions.

2. Do not proceed with utility interruptions without receiving the Owner’s written permission.

1.14 SPECIFICATION FORMATS AND CONVENTIONS

A. Section Identification: The Specifications use Section numbers and titles to help cross-referencing in the Contract Documents. Sections in the Project Manual are in numeric sequence; however, the sequence is incomplete because all available Section numbers are not used. Consult the table of contents at the beginning of the Project Manual to determine numbers and names of Sections in the Contract Documents.

B. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:

C. Abbreviated Language: Language used in the Specifications and other Contract Documents is abbreviated. Words and meanings shall be interpreted as appropriate. Words implied, but not stated, shall be inferred as the sense requires. Singular words shall be interpreted as plural and plural words shall be interpreted as singular where applicable as the context of the Contract Documents indicates.

1. Imperative mood and streamlined language are generally used in the Specifications. Requirements expressed in the imperative mood are to be performed by each Contractor. Occasionally, the indicative or subjunctive mood may be used in the Section Text for clarity to describe responsibilities that must be fulfilled indirectly by each Contractor or by others when so noted.

2. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.

D. Definitions

1. The terms “Architect”, “Engineer”, “Architect/Engineer” and “A/E” are used interchangeably throughout the specifications.

2. The terms “Owner”, “Washington County Public Schools” and “WCPS” and the “Board of Education” and the “BOE” are used interchangeably throughout the specifications.

1.15 WORK SCOPE

The scope of work includes but is not limited to providing all labor, equipment, materials, and incidentals to complete all Work in accordance with the specifications, drawings and applicable codes. All Work is to be performed as shown on the Contract Drawings and Specifications in the Project Manual. In addition to the above, the scope includes but is not limited to the Division 0 Procurement and Contract Requirements, and Division 1 General Requirements of the Project Manual.

THE SCOPE OF WORK IS TO INCLUDE, but is not limited to, the following items:

1. Contractor shall provide all required submittals to the Architect within thirty (30) days after issuance of “Notice of Award”/“Notice to Proceed”, or sooner if necessary to avoid delay of work.
2. Contractor shall be required to conduct his activities in a safe manner and shall be responsible for observing the safety regulations of MOSH, OSHA, and local life safety agencies. Contractor to provide all OSHA specified protection required, including fall protection.

3. Contractor shall maintain at all times sufficient manpower levels to meet scheduling requirements and avoid delay to completion of work.

4. Contractor shall provide as-built drawings and warranty of all work under this Contract. Provide copies of Operation and Maintenance Manuals in the format and quantity indicated in the documents. Provide instruction of Owner's personnel on maintenance of equipment and material installed by this Contract.

5. Contractor must be on site to receive and unload construction material deliveries. WCPS staff is not responsible for receiving any deliveries for this construction project. Contractor is responsible for own lifting and hoisting.

6. Contractor shall protect all existing finishes when receiving deliveries and removing trash through areas of the facility outside the limits of disturbance. Contractor shall protect all finished areas of work adjacent to area of new work as construction progresses within the project limits.

7. Provide dumpsters or trucking required to clean and remove daily from site all excess material and debris connected with this work. Should the Contractor’s cleanup be unsatisfactory, the Owner shall perform the work at the Contractor’s expense. If dumpsters are utilized, the Contractor shall coordinate with the Owner to identify a mutually agreeable location prior to commencement of work. The Contractor is responsible for preventing damage to property, such as by setting the dumpsters on plywood in paved areas, and is responsible for repairing any damage occurring as result of the dumpsters.

8. Contractor shall patch and refinish existing surfaces that are adjacent to, and affected by, work performed under this contract as necessary for a finished product in exposed areas.

9. Project Administration:
   a. The Contractor is responsible for project budget, project construction schedule, project coordination, project administration and overall site management, including safety and security.
   b. The Contractor shall be responsible for coordination of demolition and new construction work between various trades.
   c. Contractor shall comply with the directives of the Owner, and respond to the comments from the Architect for this Project.

10. Contractor is responsible for testing costs resulting from negligence, poor workmanship, or failure of work to meet the requirement of the documents. Any work determined to have been performed in a negligent manner by the Contractor shall be corrected by the Contractor at no additional cost to the Owner.

11. Contractor is responsible for taking all precautions necessary to ensure all existing utilities and equipment remain intact throughout construction. The Contractor is responsible for verifying that all utilities and equipment are in operating order upon completion of the project and if not, the Contractor is responsible for repair and/or replacement.

END OF SECTION
Building Bright Futures in Maryland

The State of Maryland and the_________Board of Education are:

(Enter Jurisdiction)

(The)

SCHOOL

(Enter School Name)

Public School Construction Program Architect: Contractor:

The Maryland General Assembly
Michael E. Busch, Speaker of the House
Thomas V. Mike Miller, Jr., President of the Senate

Board of Public Works
Larry Hogan, Governor
Peter Franchot, Comptroller
Nancy K. Kopp, Treasurer

Revised 03/2015
APPENDIX E
FOR SCHOOL CONSTRUCTION SIGN

The following appropriate language should be entered on the construction sign to describe the work for the specific project (or modified as required):

- Renovating
- Constructing an Addition and Renovating
- Constructing an Addition to
- Constructing a Replacement School for
- Constructing the New
- Constructing a Prekindergarten Addition at
- Renovating the Science Laboratories at
- Replacing the Roof at
- Replacing the Boilers at
- Replacing the Windows at
- Replacing the (other systemic) at
SECTION 00 11 16

INVITATION TO BID
INVITATION TO BID

January 18, 2017

Bid: #2017 – 11, Roof Replacement at Funkstown Elementary School

Pre-Bid Meeting: Wednesday, January 25, 2017 at 3:00 PM Local Time
at Funkstown Elementary School, 23 Funkstown Road,
Hagerstown, Maryland 21740

Bid Inquiries to: Mr. Scott Bachtell
Supervisor of Purchasing (WCPS)
Phone (301) 766-2842; Email: BachtSco@wcps.k12.md.us
Please copy Chad Criswell at criswcha@wcps.k12.md.us

Place of Bid Opening: The Washington County Public Schools Center for Education Services
Purchasing Department at 10435 Downsville Pike, Hagerstown, MD 21740

Date and Hour of Bid Opening: Wednesday, February 8, 2017 at 2:00 PM Local Time

Bids shall be submitted in duplicate, along with additional documentation required per the Bid Solicitation instructions, in a Sealed Envelope showing Bid Name and Due Date on the outside of the envelope. Faxed or Emailed bids will not be accepted. Bids delivered in person should be carried directly to the Purchasing Department and handed to a Purchasing Department staff member prior to the bid due date/time to ensure the bid is properly filed in advance of the Bid Opening.

Bids not received prior to the day/time designated for the bid opening, or bids not submitted to the Purchasing Staff, may not be properly filed. Such bids, upon discovery by the Purchasing Official, will be refused and/or returned unopened to the Bidder. The Purchasing Department is open Monday through Friday, 8:00 am – 12:00 pm and 1:00 pm – 4:30 pm local time, except national and school holidays.

Address Mail or Delivery Package to:
Attention Scott Bachtell, Supervisor of Purchasing
Telephone: (301) 766-2842
TO VIEW CURRENT SOLICITATIONS, PLEASE SEE THIS WEB ADDRESS:
http://wcpspurchasing.com/bids/opportunities

FOR BID RESULTS, PLEASE SEE THIS WEB ADDRESS:
http://wcpspurchasing.com/bids/results

Bid Solicitation Document includes the following:

- √ Instructions to Bidders (AIA A701)
- √ Technical Specifications
- √ Terms & Conditions (AIA A101)
- √ Plans/Drawings/Schematics
- √ Proposal Form

- √ General Conditions (AIA A201)
- √ Affidavit to Bid
- √ Signature Sheet
- √ Minority Business Enterprise Procedure
- √ “No-Bid” Reply Form
INVITATION TO BID, CONTINUED

NOTICE
Notice is hereby given that Washington County Public Schools will accept sealed bids for the purpose of establishing a contract to replace the roof at Funkstown Elementary School. The Contract /Bid Solicitation Documents were prepared by Bushey Feight Morin Architects (the Architect) and Washington County Public Schools (the Owner). Below is a summary of the project:

The successful Bidders shall furnish all labor, materials, equipment, and services necessary for, and incidental to, performing the work specified in the enclosed Technical Specifications and Drawings for the construction project #2017-11, Roof Replacement at Funkstown Elementary School located at 23 Funkstown Road, Hagerstown, Maryland 21740. Pricing is being requested using Maryland Prevailing Wage Rates. Minority Business Enterprise participation procedures are applicable to the bid and construction project. The construction contract will be awarded to the lowest responsible bidder with consideration given to quantities involved; time required for delivery; the purpose for which required; the competency and responsibility of the bidder; the ability of the bidder to perform satisfactory service; and the plan for utilization of minority contractors. The Washington County Board of Education (“WCBOE”) may reject any and all bids and re-advertise for other bids.

BIDS DUE
Sealed bids will be received at the Washington County Public Schools Center for Education Services, Purchasing Department at 10435 Downsville Pike, Hagerstown, Maryland, by 2:00 PM local time Wednesday, February 8, 2017.

Bids will be opened and read aloud at that time. Bids received after that time will not be accepted and will be returned unopened. Interested parties are invited to attend.

No bidder may withdraw his bid for a minimum period of sixty (60) calendar days after the day of the bid opening.

The deadline for questions about this Bid Solicitation is close of business (COB) Tuesday, January 31, 2017
BID SOLICITATION AVAILABILITY

Contractors may obtain the files that comprise the Bid Solicitation Document from the Purchasing Website on the following basis:

1. The solicitation document is available for viewing and download from the WCPS Purchasing Web site: www.wcspurchasing.com. The bid solicitation document is made available to any person or company who chooses to obtain it from the website. PREQUALIFICATION TO SUBMIT A BID IS A REQUIREMENT. ALL CONTRACTORS WHO have obtained a copy of the document from the website or by other means may not be eligible to submit a bid. **Only the WCPS Purchasing Department can grant approval to bid. Only pre-qualified contractors are eligible to bid this project.** Registration via the WCPS website is mandatory and is a two-step process. Approval at step one only of the application is not sufficient for bidding construction work. WCPS Purchasing Department will notify each contractor in writing upon approval of the application to bid construction projects.

2. To check whether or not your company is pre-qualified, you may contact the Purchasing Department by calling Beverly Bergan at 301-766-2841, or by email to: bergabev@wcps.k12.md.us. The Bid Solicitation consists of electronic files which provide instructions, technical specifications, drawings, and supplemental addenda issued prior to the bid opening.

3. The Bidder assumes all responsibility for downloading all electronic files and for coordinating any pertinent information contained in the Bidding Documents. Downloading/viewing only specific files or partial information will not relieve the contractor or subcontractor from the Work indicated on other drawings or specifications comprising the complete bid solicitation.

4. Bids received from contractors who have not been pre-qualified seven days prior to the bid opening date may be refused or returned unopened to them. To become pre-qualified, complete the Prequalification Questionnaire available by contacting the Purchasing Department or by visiting our website, http://wcspurchasing.com/vendors-contractors/becoming-wcps-vendor.

5. Contractors and subcontract bidders must be licensed to perform construction work in the State of Maryland in order to be eligible to bid. Contractors must meet WCPS’ eligibility requirements in order to bid this project as a prime bidder.
MINORITY BUSINESS ENTERPRISE (MBE)
This bid/project is subject to Minority Business Enterprise Procedures for State Funded Public School Construction Projects. Certified Minority Business Enterprises are encouraged to respond to this solicitation notice.

All contractors, including certified MBE firms, when submitting bids as general or prime contractors, are required to attempt to achieve the MBE subcontract participation goals and subgoals established for this construction project from MDOT certified MBE firms. Please visit the WCPS Purchasing Department website for a list of MDOT certified MBE firms that may be potential subcontractors.

The overall certified MBE subcontracting goal for this project is 19% with a subgoal of 7% for African American-owned businesses and a subgoal of 4% for Asian American-owned businesses. Refer to Specification Section 00 43 39 for detailed MBE procedures and MBE forms.

The bidder is required to submit with its bid a completed Attachment A – Certified MBE Utilization and Fair Solicitation Affidavit and Attachment B – MBE Participation Schedule, as described in the MBE Procedures included in the bid solicitation documents.

Notice to Bidders: In accordance with COMAR, a new MBE liquidated damages provision has been added to the AIA Document A101 – 2007 Standard Form of Agreement Between Owner and Contractor, as amended by Washington County Board of Education (Article 8.7 in Specification Section 00 52 13).

PREVAILING AND NON-PREVAILING WAGE RATES
This construction project is being re-bid both with Prevailing Wage Rates AND without Prevailing Wage Rates. The schedule of Wage Rates from the State of Maryland Department of Labor, Licensing and Regulation (DLLR) is included in the bid solicitation documents. Please notify any outsource bidder that compliance with DLLR regulations is a requirement and compliance must be verified in advance of bidding.

OBSERVATION TO AWARD
Any company objecting to the bid procedure or the recommendation for award has five (5) business days following the date of award by the Board of Education to file a written protest with the Superintendent of Schools. It is the company’s responsibility to ascertain and confirm the date/time of the pertinent Board Meeting. The written appeal must be submitted on company letterhead, dated and signed by the senior officer in the company. The protest letter must include a request for review and ruling by WCPS, a detailed statement of the legal and factual grounds for the protest, including the resulting prejudice to the company, copies of relevant documents, and a statement of the form of relief being requested. Failure to comply with these instructions may result in the protest being deemed “not filed.” Bid protests received later than five (5) days after the Board Meeting will result in the protest being deemed “not timely.” WCPS will not respond or address bid protests that do not conform to these instructions.
BIDDING REQUIREMENTS
Bid Security Bond in the amount of 5% of the Total Bid is required from all Bidders. The Bid Security Bond serves as security for obtaining Performance Bond and Payment Bonds in 100% of the Contract amount from the successful bidder within ten (10) days from Notice of Award of the Contract. Bidder must use the AIA bond form versions provided herein. Only AIA forms that have been reviewed for acceptance by WCPS legal counsel will be acceptable.
The Owner may make such investigations as he deems necessary to determine the ability of the Bidder to perform the Work, and prospective Bidders may be required to furnish evidence of performance of similar projects of similar magnitude and complexity and all such information and data as requested. The Owner reserves the right to reject any bid if the evidence submitted by, or investigation of, such Bidder fails to satisfy the Owner that such bidder is properly qualified to carry out the obligation of the Contract and to complete the Work contemplated therein.
The Owner reserves the right to reject any or all bids, to waive irregularities in the bids, select alternates in any order and to make the award in the manner that the WCBOE determines will best serve the interests of WCPS.

By order of: Washington County Public Schools
Scott Bachtell, Supervisor of Purchasing
SECTION 00 20 00

STANDARD FORM OF PROPOSAL
WASHINGTON COUNTY PUBLIC SCHOOLS
Hagerstown, Maryland

FUNKSTOWN ELEMENTARY SCHOOL
ROOF REPLACEMENT

at

23 Funkstown Road
Hagerstown, Maryland 21740

Bid Opening - Time: 2:00 PM Local Time Wednesday, February 1, 2017

FORM OF PROPOSAL – BID NO. 2017 - 11

Proposal of ____________________________________________
(Corporation, a partnership, or an individual hereinafter called “Bidder”) organized and doing business and existing under the laws of the state of ________________________________.

I/We as the Bidder, in compliance with the Invitation to Bid for the selected contract package included herein for the Roof Replacement work at Funkstown Elementary School, have examined the Bidding Documents, and have become familiar with all the conditions surrounding the construction of the proposed project, including the availability of materials and labor, hereby propose to furnish all labor, materials, services and equipment necessary to properly complete the Work in accordance with the Contract Documents and Addenda, and at the prices stated below. These prices are to cover all expenses incurred in performing the Work required under the Contract Documents, of which this Proposal is a part.

All prices include all applicable sales and/or use taxes; include all insurance premiums required and include all premiums for a Performance Bond and a Labor and Material Payment Bond in the sum of one hundred percent (100%) of the Contract price. A five percent (5%) Bid Bond shall be attached to the Proposal. The Bid Bond amount shall be computed on the Lump Sum Total Price inclusive of Alternate Values; shall be submitted with the Washington County Board of Education as the sole obligee, and shall be issued for a minimum period of sixty (60) calendar days from the receipt of Bids.

PREQUALIFICATION
To become prequalified to be this project, visit our website: http://wcpspurchasing.com/vendors-contractors/becoming-wcps-vendor. The application to participate as a prime bidder in a construction or related project is a two-step process and both steps of the process must be successfully completed in order to submit a bid. Bids received from contractors who have not been pre-qualified by the Purchasing Officer at least seven days prior to the bid opening will be refused or returned unopened to the sender.

COMPLETION TIME – SCHEDULE OF WORK
I/We as the Bidder, agree to begin to perform the Work at the time stated in the “Notice to Award/Proceed” and to substantially complete the entire work in accordance with the provisions of the Contract Documents. If this work is not completed within the time period specified, I/we will be liable for Liquidated Damages of $1,000.00 per calendar day.
**FUNKSTOWN ELEMENTARY SCHOOL – ROOF REPLACEMENT**  
**WASHINGTON COUNTY, MARYLAND**

**BASE BID (Non-Prevailing Wage)**  
Bidders furnish all labor, materials, services, and equipment necessary to properly complete the Work required for the Roof Replacement project at Funkstown Elementary School in strict accordance with the Contract Documents for the following lump sum total:

**Lump Sum Total:**

<table>
<thead>
<tr>
<th>Amount in words</th>
<th>DOLLARS $</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Amount in numbers)</td>
<td>(Amount in numbers)</td>
</tr>
</tbody>
</table>

This base bid amount is not subject to Prevailing Wage Rates.

**BASE BID (a) (Prevailing Wage)**  
Bidders furnish all labor, materials, services, and equipment necessary to properly complete the Work required for the Roof Replacement project at Funkstown Elementary School in strict accordance with the Contract Documents for the following lump sum total:

**Lump Sum Total:**

<table>
<thead>
<tr>
<th>Amount in words (Paying Prevailing Wage)</th>
<th>DOLLARS $</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Amount in numbers)</td>
<td>(Amount in numbers)</td>
</tr>
</tbody>
</table>

This base bid amount is subject to Prevailing Wage Rates in accordance with the State of Maryland Department of Labor, Licensing and Regulation (DLLR).

**UNIT PRICES (Non-Prevailing Wage)**  
Bidders shall furnish all labor, materials, equipment, and services necessary for the unit price incidental to, the preparation of, and the installation of materials to properly complete the work required in strict accordance with the aforesaid documents, specifically Specification section 01 20 00, for the following sum on the basis of unit prices quoted herein.

Work defined as unit prices below is included in the scope of the base bid at bid quantities defined in the solicitation or by bidder take off or field measures. Unit prices offered below will be applicable **only to add change orders to the contract**. These unit prices are not subject to Prevailing Wage Rates. Prices quoted shall be the sum total compensation payable for such items of additional work, if any:

1) **Repair Gypsum Deck** – Includes material and labor to patch / repair existing gypsum deck per Section 03 51 00 as deemed necessary by the Owner/ Architect. Base Quantity to be provided by contract is 100 s.f. Unit of measure: Square Feet.

   Per SF: __________________________ DOLLARS $  
   (Amount in Words) (Amount in Numbers)

2) **Replace Gypsum Deck** – Includes material and labor to replace existing gypsum deck per Section 03 51 00 as deemed necessary by the Owner/ Architect. Base Quantity to be provided by contract is 100 s.f. Unit of measure: Square Feet.

   Per SF: __________________________ DOLLARS $  
   (Amount in Words) (Amount in Numbers)
3) Blocking – Includes material and labor and all other costs for 2x8 blocking due to deterioration or damage or additional blocking would be required not specifically called for on the Drawings and Specification. Unit of measure: Lineal Feet.

   Per LF: _______________________________ DOLLARS $ __________________
          (Amount in Words)          (Amount in Numbers)

4) Re-Pointing - Masonry repointing above roof decks over quantities indicated in Section 04 90 01. Unit of measure: Square Foot.

   Per SF: _______________________________ DOLLARS $ __________________
            (Amount in Words)          (Amount in Numbers)

UNIT PRICES (Prevailing Wage)

Bidders shall furnish all labor, materials, equipment, and services necessary for the unit price incidental to, the preparation of, and the installation of materials to properly complete the work required in strict accordance with the aforesaid documents, specifically Specification section 01 20 00, for the following sum on the basis of unit prices quoted herein.

Work defined as unit prices below is included in the scope of the base bid at bid quantities defined in the solicitation or by bidder take off or field measures. Unit prices offered below will be applicable only to add change orders to the contract. These unit prices are subject to Prevailing Wage Rates in accordance with the State of Maryland Department of Labor, Licensing and Regulation (DLLR). Prices quoted shall be the sum total compensation payable for such items of additional work, if any:

1a) Repair Gypsum Deck – Includes material and labor to patch / repair existing gypsum deck per Section 03 51 00 as deemed necessary by the Owner/ Architect. Base Quantity to be provided by contract is 100 s.f. Unit of measure: Square Feet.

   Per SF: _______________________________ DOLLARS $ __________________
            (Paying Prevailing Wage) (Amount in Words)          (Amount in Numbers)

2a) Replace Gypsum Deck – Includes material and labor to replace existing gypsum deck per Section 03 51 00 as deemed necessary by the Owner/ Architect. Base Quantity to be provided by contract is 100 s.f. Unit of measure: Square Feet.

   Per SF: _______________________________ DOLLARS $ __________________
            (Paying Prevailing Wage) (Amount in Words)          (Amount in Numbers)

3a) Blocking – Includes material and labor and all other costs for 2x8 blocking due to deterioration or damage or additional blocking would be required not specifically called for on the Drawings and Specification. Unit of measure: Lineal Feet.

   Per LF: _______________________________ DOLLARS $ __________________
            (Paying Prevailing Wage) (Amount in Words)          (Amount in Numbers)

4a) Re-Pointing - Masonry repointing above roof decks over quantities indicated in Section 04 90 01. Unit of measure: Square Foot.

   Per SF: _______________________________ DOLLARS $ __________________
            (Amount in Words)          (Amount in Numbers)
**ALTERNATES (Non-Prevailing Wage)**

The prices stated below provide for the complete installation of the Alternate Work as described herein. The prices for Alternate Bids, if accepted, will be added to the Base Bid to determine the total Contract Sum. The Owner reserves the right to accept or reject any, or all, Alternates in any order or combination. Acceptance or rejection of any Alternates does not relieve the Contractor of timely completion of the Work within the required time period. These Alternate prices are not subject to Prevailing Wage Rates.

Alternate Bids are more fully described in Specification Section “01 01 00 – Summary of Work”.

Alternate Bids shall include all costs associated with the described Alternate or reasonably inferable therefrom.

**Alternate No. 1:** BUR-SBS system.

Amount to be added to the Base Bid for adding BUR-SBS system to be installed in lieu of single ply membrane including base sheet, 3 intermediate plies and the SBS cap sheet per Section 07 52 00.

Lump Sum Total:

<table>
<thead>
<tr>
<th>Amount in words</th>
<th>DOLLARS $</th>
</tr>
</thead>
</table>

**Alternate No. 2:** Metal Wall Panels

Amount to be added to the Base Bid for replacing the metal wall panels above the existing windows or entrances around perimeter of building with new flush metal panels per section 07 41 00.

Lump Sum Total:

<table>
<thead>
<tr>
<th>Amount in words</th>
<th>DOLLARS $</th>
</tr>
</thead>
</table>

**ALTERNATES (Prevailing Wage)**

The prices stated below provide for the complete installation of the Alternate Work as described herein. The prices for Alternate Bids, if accepted, will be added to the Base Bid to determine the total Contract Sum. The Owner reserves the right to accept or reject any, or all, Alternates in any order or combination. Acceptance or rejection of any Alternates does not relieve the Contractor of timely completion of the Work within the required time period. These Alternate prices are subject to Prevailing Wage Rates in accordance with the State of Maryland Department of Labor, Licensing and Regulation (DLLR).

Alternate Bids are more fully described in Specification Section “01 01 00 – Summary of Work”.

Alternate Bids shall include all costs associated with the described Alternate or reasonably inferable therefrom.

**Alternate No. 1a:** BUR-SBS system.

Amount to be added to the Base Bid for adding BUR-SBS system to be installed in lieu of single ply membrane including base sheet, 3 intermediate plies and the SBS cap sheet per Section 07 52 00.

Lump Sum Total:

<table>
<thead>
<tr>
<th>Amount in words</th>
<th>DOLLARS $</th>
</tr>
</thead>
</table>
Alternate No. 2a: Metal Wall Panels

Amount to be added to the Base Bid for replacing the metal wall panels above the existing windows or entrances around perimeter of building with new flush metal panels per section 07 41 00.

Lump Sum Total:

<table>
<thead>
<tr>
<th>Amount in words</th>
<th>DOLLARS $</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ADDENDA
The following Addenda have been received and reviewed and all Work therein is incorporated in the Bid Form of Proposal:

If none please write “NONE”:

<table>
<thead>
<tr>
<th>Addendum No.</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ATTACHMENTS
The following items are mandatory and are to be included with the Bid Form of Proposal and shall be completed by the Bidder:

1. WCPS Bid/Proposal Affidavit
2. Bid Security – See Section 00 43 13 – AIA Document A310-2010 Bid Bond
3. MBE Attachment A – See Section 00 43 39 – “Minority Business Enterprise Procedures”
4. MBE Attachment B – See Section 00 43 39 – “Minority Business Enterprise Procedures”

REPRESENTATIONS
I/We as the Bidder, have reviewed the complete AIA Document A701 – 1997 “Instructions to Bidders,” as modified by the Washington County Board of Education, and agree with the terms and conditions specified therein and submit this Bid Proposal in accordance.

The Owner reserves the right to reject any or all Bids. The Owner shall have the right to waive informalities and irregularities in the bids and in the bidding process and to accept the Bid which, in the Owner’s judgment, is in the Owner’s own best interests. A Bid not accompanied by a required bid security, or by other data required by the Bidding Documents, or a Bid which is in any way incomplete or irregular, is subject to rejection. No Bidder shall withdraw, modify, or cancel his bid, or any part thereof, for a minimum of sixty (60) calendar days after the receipt of bids. The undersigned shall complete the total Work within the timeframe previously stated once the Owner indicates acceptance of this Bid Proposal by way of a written “Notice of Award” or “Letter of Intent” within this minimum sixty (60) day time period, or any time thereafter before the Bid is withdrawn.
I/We certify that this Bid is made without previous understanding, agreement, or connection with any person, firm or corporation submitting a bid for the same items and/or services and is, in all respects fair and without collusion or fraud; that none of this company's officers, directors or its employees have been convicted of bribery, attempted bribery, or conspiracy to bribe under the laws of any state or federal government; and that no member of the Board of Education of Washington County, administrative or supervisory personnel or other employees of Washington County Public Schools have any interest in the bidding company except as follows:
(complete if applicable)

________________________________________________________________________________

Respectfully submitted,

By ____________________________________________________________

(Company)

________________________________________________________

(Signature) (Date)

________________________________________________________

(Printed Name) (Title)

________________________________________________________

(Business Address) (Phone)

(SEAL) If bid is by Corporation
I/we the bidder represent, and agree that it is a precedent to acceptance of this bid, that the bidder has not been a party to any agreement to bid of fixed or uniform price.

________________________________________________________

(Signature of Office & Title) (SEAL)

SUBSCRIBED AND SWORN to before me, a Notary Public in the State of ________________, County of ________________ City of ________________ this ________________ day of ________________, 2016.

Commission Expires: ________________________________

NOTICE: The Washington County Board of Education reserves the right to award any, all or none due to budgetary constraints.
SECTION 00 20 50

WCPS BID AFFIDAVIT
MANDATORY BID/PROPOSAL AFFIDAVIT

COMAR 21.05.08.07

Bidder shall complete and submit this bid/proposal affidavit to the Supervisor of Purchasing, Washington County Public Schools with the bid or offer.

A. AUTHORITY

I HEREBY AFFIRM THAT:

I (print name)__________________________ possess the legal authority to make this Affidavit.

B. CERTIFICATION REGARDING COMMERCIAL NONDISCRIMINATION

The undersigned bidder hereby certifies and agrees that the following information is correct: In preparing its bid on this project, the bidder has considered all proposals submitted from qualified, potential subcontractors and suppliers, and has not engaged in “discrimination” as defined in §19-103 of the State Finance and Procurement Article of the Annotated Code of Maryland. “Discrimination” means any disadvantage, difference, distinction, or preference in the solicitation, selection, hiring, or commercial treatment of a vendor, subcontractor, or commercial customer on the basis of race, color, religion, ancestry, or national origin, sex, age, marital status, sexual orientation, or on the basis of disability or any otherwise unlawful use of characteristics regarding the vendor’s, supplier’s or commercial customer’s employees or owners. “Discrimination” also includes retaliating against any person or other entity for reporting any incident of “discrimination”. Without limiting any other provision of the solicitation on this project, it is understood that, if the certification is false, such false certification constitutes grounds for the State to reject the bid submitted by the bidder on this project, and terminate any contract awarded based on the bid. As part of its bid or proposal, the bidder herewith submits a list of all instances within the past 4 years where there has been a final adjudicated determination in a legal or administrative proceeding in the State of Maryland that the bidder discriminated against subcontractors, vendors, suppliers, or commercial customers, and a description of the status or resolution of that determination, including any remedial action taken. Bidder agrees to comply in all respects with the State’s Commercial Nondiscrimination Policy as described under Title19 of the State Finance and Procurement Article of the Annotated Code of Maryland.

B-1 Certification Regarding Minority Business Enterprises.

The undersigned bidder hereby certifies and agrees that it has fully complied with the State Minority Business Enterprise Law, State Finance and Procurement Article, §14-308 (a)(2), Annotated Code of Maryland, which provides that, except as otherwise provided by law, a contractor may not identify a certified minority business enterprise in a bid or proposal and:
(1) Fail to request, receive, or otherwise obtain authorization from the certified minority business enterprise to identify the certified minority proposal;

(2) Fail to notify the certified minority business enterprise before execution of the contract of its inclusion in the bid or proposal;

(3) Fail to use the certified minority business enterprise in the performance of the contract; or

(4) Pay the certified minority business enterprise solely for the use of its name in the bid or proposal.

Without limiting any other provision of the solicitation on this project, it is understood that if the certification is false, such false certification constitutes grounds for the State to reject the bid submitted by the bidder on this project, and terminate any contract awarded based on the bid.

C. AFFIRMATION REGARDING BRIBERY CONVICTIONS

I FURTHER AFFIRM THAT:

Neither I, nor to the best of my knowledge, information, and belief, the above business (as is defined in Section 16-101(b) of the State Finance and Procurement Article of the Annotated Code of Maryland), or any of its officers, directors, partners, controlling stockholders, or any of its employees directly involved in the business's contracting activities including obtaining or performing contracts with public bodies has been convicted of, or has had probation before judgment imposed pursuant to Criminal Procedure Article, §6-220, Annotated Code of Maryland, or has pleaded nolo contendere to a charge of bribery, attempted bribery, or conspiracy to bribe in violation of Maryland law, or of the law of any other state or federal law, except as follows (indicate the reasons why the affirmation cannot be given and list any conviction, plea, or imposition of probation before judgment with the date, court, official or administrative body, the sentence or disposition, the name(s) of person(s) involved, and their current positions and responsibilities with the business):

________________________________________________________________________

________________________________________________________________________

D. AFFIRMATION REGARDING OTHER CONVICTIONS

I FURTHER AFFIRM THAT:

Neither I, nor to the best of my knowledge, information, and belief, the above business, or any of its officers, directors, partners, controlling stockholders, or any of its employees directly involved in the business's contracting activities including obtaining or performing contracts with public bodies, has:
(1) Been convicted under state or federal statute of:

   (a) A criminal offense incident to obtaining, attempting to obtain, or performing a public
       or private contract; or

   (b) Fraud, embezzlement, theft, forgery, falsification or destruction of records or
       receiving stolen property;

(2) Been convicted of any criminal violation of a state or federal antitrust statute;

(3) Been convicted under the provisions of Title 18 of the United States Code for violation of the
    Racketeer Influenced and Corrupt Organization Act, 18 U.S.C. §1961 et seq., or the Mail Fraud
    Act, 18 U.S.C. §1341 et seq., for acts in connection with the submission of bids or proposals for a
    public or private contract;

(4) Been convicted of a violation of the State Minority Business Enterprise Law, §14-308 of the
    State Finance and Procurement Article of the Annotated Code of Maryland;

(5) Been convicted of a violation of §11-205.1 of the State Finance and Procurement Article of
    the Annotated Code of Maryland;

(6) Been convicted of conspiracy to commit any act or omission that would constitute grounds for
    conviction or liability under any law or statute described in subsections (1)—(5) above;

(7) Been found civilly liable under a state or federal antitrust statute for acts or omissions in
    connection with the submission of bids or proposals for a public or private contract; or

(8) Been found in a final adjudicated decision to have violated the Commercial
    Nondiscrimination Policy under Title 19 of the State Finance and Procurement Article of the
    Annotated Code of Maryland with regard to a public or private contract; or

(9) Admitted in writing or under oath, during the course of an official investigation or other
    proceedings, acts or omissions that would constitute grounds for conviction or liability under any
    law or statute described in §§B and C and subsections D (1)- (8) above, except as follows
    (indicate reasons why the affirmations cannot be given, and list any conviction, plea, or
    imposition of probation before judgment with the date, court, official or administrative body, the
    sentence or disposition, the name(s) of the person(s) involved and their current positions and
    responsibilities with the business, and the status of any debarment):

E. AFFIRMATION REGARDING DEBARMENT
I FURTHER AFFIRM THAT:

Neither I, nor to the best of my knowledge, information, and belief, the above business, or any of its officers, directors, partners, controlling stockholders, or any of its employees directly involved in the business's contracting activities, including obtaining or performing contracts with public bodies, has ever been suspended or debarred (including being issued a limited denial of participation) by any public entity, except as follows (list each debarment or suspension providing the dates of the suspension or debarment, the name of the public entity and the status of the proceedings, the name(s) of the person(s) involved and their current positions and responsibilities with the business, the grounds of the debarment or suspension, and the details of each person's involvement in any activity that formed the grounds of the debarment or suspension).

__________________________

__________________________

F. AFFIRMATION REGARDING DEBARMENT OF RELATED ENTITIES

I FURTHER AFFIRM THAT:

(1) The business was not established and it does not operate in a manner designed to evade the application of or defeat the purpose of debarment pursuant to Sections 16-101, et seq., of the State Finance and Procurement Article of the Annotated Code of Maryland; and

(2) The business is not a successor, assignee, subsidiary, or affiliate of a suspended or debarred business, except as follows (you must indicate the reasons why the affirmations cannot be given without qualification):

__________________________

__________________________

G. SUB-CONTRACT AFFIRMATION

I FURTHER AFFIRM THAT:

Neither I, nor to the best of my knowledge, information, and belief, the above business, has knowingly entered into a contract with a public body under which a person debarred or suspended under Title 16 of the State Finance and Procurement Article of the Annotated Code of Maryland will provide, directly or indirectly, supplies, services, architectural services, construction related services, leases of real property, or construction.
H. AFFIRMATION REGARDING COLLUSION

I FURTHER AFFIRM THAT:

Neither I, nor to the best of my knowledge, information, and belief, the above business has:

(1) Agreed, conspired, connived, or colluded to produce a deceptive show of competition in the compilation of the accompanying bid or offer that is being submitted;

(2) In any manner, directly or indirectly, entered into any agreement of any kind to fix the bid price or price proposal of the bidder or offeror or of any competitor, or otherwise taken any action in restraint of free competitive bidding in connection with the contract for which the accompanying bid or offer is submitted.

I. CERTIFICATION OF TAX PAYMENT

I FURTHER AFFIRM THAT:

Except as validly contested, the business has paid, or has arranged payment of, all taxes due the State of Maryland and has filed all required returns and reports with the Comptroller of the Treasury, the State Department of Assessments and Taxation, and the Department of Labor, Licensing, and Regulation, as applicable, and will have paid all withholding taxes due the State of Maryland prior to final settlement.

J. CONTINGENT FEES

I FURTHER AFFIRM THAT:

The business has not employed or retained any person, partnership, corporation, or other entity, other than a bona fide employee, bona fide agent, bona fide salesperson, or commercial selling agency working for the business, to solicit or secure the Contract, and that the business has not paid or agreed to pay any person, partnership, corporation, or other entity, other than a bona fide employee, bona fide agent, bona fide salesperson, or commercial selling agency, any fee or any other consideration contingent on the making of the Contract.

K. ACKNOWLEDGEMENT

I ACKNOWLEDGE THAT this Affidavit is to be furnished to the Procurement Officer and may be distributed to units of: (1) the State of Maryland; (2) counties or other subdivisions of the State of Maryland; (3) other states; and (4) the federal government. I further acknowledge that this Affidavit is subject to applicable laws of the United States and the State of Maryland, both criminal and civil, and that nothing in this Affidavit or any contract resulting from the submission of this bid or proposal shall be construed to supersede, amend, modify or waive, on behalf of the State of Maryland, or any unit of the State of Maryland having jurisdiction, the exercise of any statutory right or remedy conferred by the constitution and the laws of Maryland with respect to any misrepresentation made or any violation of the
obligations, terms, and covenants undertaken by the above business with respect to (1) this Affidavit, (2) the contract, and (3) other Affidavits comprising part of the contract.

I DO SOLEMNLY DECLARE AND AFFIRM UNDER THE PENALTIES OF PERJURY THAT THE CONTENTS OF THIS AFFIDAVIT ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE, INFORMATION, AND BELIEF.

Date: ________________________________

By: ________________________________

(Print name of Authorized Representative and Affiant)

______________________________

(Signature of Authorized Representative and Affiant)

______________________________

(Company name)
WASHINGTON COUNTY PUBLIC SCHOOLS
P.O. Box 730
Hagerstown, Maryland 21741

PURCHASING DEPARTMENT

“NO BID” REPLY FORM

Bidder:

To assist us in obtaining good competition on our Invitations to Bid, we ask that each firm that has received an invitation, but does not wish to bid, state their reason(s) below. This information will not preclude receipt of future invitations unless you request removal from the Bidders List by so indicating below.

BID#: 2017-11

BID TITLE: Roof Replacement at Funkstown Elementary School

Unfortunately, we must offer a “NO BID” at this time because:

☐ 1. We do not wish to participate in the bid process.

☐ 2. We do not wish to bid under the terms and conditions of the Invitation to Bid document. Our objections are:

__________________________________________________________________________
__________________________________________________________________________

☐ 3. We do not feel we can be competitive.

☐ 4. We cannot submit a bid because of the marketing or franchising policies of the manufacturing company.

☐ 5. We do not wish to sell to the Washington County Public Schools. Our objections are:

__________________________________________________________________________
__________________________________________________________________________

☐ 6. We do not sell the items/services on which bids are requested.

☐ 7. Other: ____________________________________________________________________

__________________________________________________________________________

FIRM ____________________________________________

SIGNED __________________________________________

☐ We wish to remain on the Bidders List

☐ We wish to be deleted from the Bidders List.
SECTION 00 21 13

AIA DOCUMENT A701-1997

INSTRUCTIONS TO BIDDERS BY WCBOE
Instructions to Bidders

for the following PROJECT:
(Name and location or address):

THE OWNER:
(Name and address):
Washington County Board of Education
10435 Downsville Pike
Hagerstown, MD 21740

THE ARCHITECT:
(Name and address):

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 FORM OF AGREEMENT BETWEEN OWNER AND CONTRACTOR

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.
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 other sample bidding and contract forms. The proposed Contract Documents consist of the form of Agreement between the Owner and Contractor, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications and all Addenda issued prior to execution of the Contract.

§ 1.2 Definitions set forth in the General Conditions of the Contract for Construction, AIA Document A201 as modified by the Board of Education of Washington County, or in other Contract Documents are applicable to the Bidding Documents.

§ 1.3 Addenda are written or graphic instruments issued by the Architect prior to the execution of the Contract which modify or interpret the Bidding Documents, including Drawings and Specifications, by additions, deletions, clarifications or corrections. Addenda will become part of the Contract Documents when the Construction Contract is executed.

§ 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 as the base, to which Work may be added or from which Work may be deleted for 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 the amount of 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 The Bidder by making a Bid represents that:

§ 2.1.1 The Bidder has read and understands the Bidding Documents or Contract Documents, to the extent that such documentation relates to the Work for which the Bid is submitted, and for other portions of the Project, if any, being bid concurrently or presently under construction.

§ 2.1.2 The Bid is made in compliance with the Bidding Documents.

§ 2.1.3 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 personal observations with the requirements of the proposed Contract Documents.

§ 2.1.4 The Bid is based upon the materials, equipment and systems required by the Bidding Documents without exception.

§ 2.1.5 Generally, neither law nor regulations make allowance for negligent errors either of omission or commission on the part of the bidders. Each Bidder, by making his Bid, represents that he has read and understands the Bidding Documents. Failure of the Bidder to thoroughly understand all aspects of the Solicitation before submitting his Bid will not act as an excuse to permit withdrawal of his Bid nor secure relief on plea of error.

§ 2.1.6 Once the Contract is awarded to the successful Bidder, no claims for any extra work will be allowed because of alleged impossibilities in the production of the results specified, or because of inadequate or improper plans or
specifications, and whenever a result is required, the successful Bidder shall furnish any and all extras and make any changes needed to produce, to the satisfaction of the Owner, the required results.

§ 2.1.7 The Bidder shall warrant that no person or selling agency has been employed or retained to solicit or secure the Contract upon an agreement of understanding for a commission or percentage, brokerage or contingent fee excepting bona fide employees or bona fide established commercial or selling agencies maintained by the bidder for the purpose of securing business. For breach or violation of the warrantee the Owner shall have the right to annul the Contract without liability or at its discretion to deduct from the contract price or otherwise recover the full amount of such commission, percentage, brokerage, or contingent.

§ 2.1.8 The Bidder, by the submission of this Bid agrees as a supplier of good, materials, equipment, or services covered by this Bid or the Contract that he will not discriminate in the employment in any way against any person or persons because of their race, creed, color, sex, national origin, age, or handicap. The Owner does not discriminate on the basis of race, color, sex, age, national origin, religion, or disability.

ARTICLE 3 BIDDING DOCUMENTS

§ 3.1 COPIES

§ 3.1.1 Bidders may obtain complete sets of the Bidding Documents from the issuing office designated in the Advertisement or Invitation to Bid. Either a CD on which all of the Bidding Documents have been scanned or one (1) hard copy set of Bidding Documents will be issued to each bonafide bidder.

§ 3.1.2 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.

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

§ 3.1.4 The Owner and Architect may make copies of the Bidding Documents available on the above terms for the purpose of obtaining Bids on the Work. No license or grant of use is conferred by issuance of copies of the Bidding Documents.

§ 3.2 INTERPRETATION OR CORRECTION OF BIDDING DOCUMENTS

§ 3.2.1 The Bidder shall carefully study and compare the Bidding Documents with each other, and with other work being bid concurrently or presently under construction to the extent that it relates to the Work for which the Bid is submitted, shall examine the site and local conditions, and shall at once report to the Architect errors, inconsistencies or ambiguities discovered.

§ 3.2.2 Bidders and Sub-bidders requiring clarification or interpretation of the Bidding Documents shall make a written request which shall reach the Architect at least seven days prior to the date for receipt of Bids.

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

§ 3.2.4 Questions shall be in writing and sent to the Owner for interpretation and/or clarification.

§ 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 No substitution will be considered prior to receipt of Bids unless written request for approval has been received by the Architect at least ten days prior to the date for receipt of Bids. Such requests shall include the name of the material or equipment for which it is to be substituted and a complete description of the proposed substitution including drawings, performance and test data, and other information necessary for an evaluation. A statement setting forth changes in other materials, equipment or other portions of the Work, including changes in the work of other
contracts that incorporation of the proposed substitution would require, shall be included. The burden of proof of the
merit of the proposed substitution is upon the proposer. Where less than three (3) manufacturers or products are listed
in the Specifications, or the specification lists “Approved Equal” as an acceptable product, the burden of proof of
equivalency rests with the Contractor and evidence shall be submitted to the Architect and approved by Architect with
final approval to be determined by the Owner. Criteria includes but is not limited to performance, materials,
craftsmanship, quality control, certification procedures or requirements, warranty, installation procedures, etc. Any
proposed substitution, or proposed equal product, must be submitted to the Architect for review, 10 days prior to the
bid date. After the receipt of bids and award of the Contract, the Owner and Architect are under no obligation to
review or approve requests for substitution or equal products that were not specifically mentioned in the
Specifications. The Owner reserves the right to request a substitute at any time in the project.

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

§ 3.3.4 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 all who are known by the issuing office to have received a complete set of
Bidding Documents.

§ 3.4.2 Copies of Addenda will be made available for inspection wherever Bidding Documents are on file for that
purpose.

§ 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 Each Bidder shall ascertain prior to submitting a Bid 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 the Bidding Documents.

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

§ 4.1.3 Sums shall be expressed in both words and figures. In case of discrepancy, the amount written in words shall
govern.

(Paragraph deleted)
§ 4.1.5 All requested Alternates shall be bid. If no change in the Base Bid is required, enter “No Change.”

(Paragraph deleted)
§ 4.1.7 Each copy of the Bid shall state the legal name of the Bidder and the nature of legal form of the Bidder. The
Bidder shall provide evidence of legal authority to perform within the jurisdiction of the Work. Each copy shall be
signed by the person or persons legally authorized to bind the Bidder to a contract. A Bid by a corporation shall further
give 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 The contractor or subcontractor shall use or supply American steel products in performance of this Contract in
accordance with the Annotated Code of Maryland, State Finance and Procurement
Article 17-301 – 17-306 as implemented in the Code of Maryland Regulations (COMAR) 21.11.02.

§ 4.2 BID SECURITY
§ 4.2.1 Each Bid shall be accompanied by a bid security in the form and amount required. The Bidder pledges to enter
into a Contract with the Owner on the terms stated in the Bid and will 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, the amount of the bid security shall be forfeited to the Owner as liquidated damages, not as a penalty. The successful Bidder, upon his failure or refusal to execute and deliver the bonds required in Article 7 within ten (10) days after Notice of Award of the Contract shall forfeit to the Owner, as liquidated damages for such failure or refusal, the security deposited with his Bid.

§ 4.2.1.1 Bid bond shall be in the amount of five percent (5%) of the total Bid and shall be submitted with the Washington County Board of Education as the sole obligee and shall be issued for a period of sixty (60) calendar days from the receipt of Bids.

§ 4.2.2 Surety bond shall be written on AIA Document A310, Bid Bond 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 the power of attorney.

§ 4.2.3 The Owner will have the right to retain the bid security of Bidders to whom an award is being considered until either (a) the Contract has been executed and bonds, if required, have been furnished, or (b) the specified time has elapsed so that Bids may be withdrawn or (c) all Bids have been rejected.

§ 4.3 SUBMISSION OF BIDS

§ 4.3.1 All 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. Submit the Standard Form of Proposal and required documents in duplicate.

§ 4.3.2 Bids shall be deposited at the designated location prior to the time and date for receipt of Bids. Bids received after the time and date for receipt of Bids will be returned unopened.

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

§ 4.3.4 Oral, telephonic, telegraphic, facsimile or other electronically transmitted bids will not be considered.

§ 4.3.5 All prospective bidders must be currently pre-qualified with the WCPS Purchasing Department to be eligible to participate in the bidding process.

§ 4.3.6 Upon request of the Owner, Bidders should be prepared to provide a list of major subcontractors after submission of bids and within two (2) business days of the request.

§ 4.3.7 Errors in bids: Bidders or their authorized representatives are expected to read and review the bid solicitation documents in order to inform themselves as to the conditions, requirements, and specifications before they submit bids: failure to do so will be at the bidder’s own risk and the bidder cannot secure relief from the plea of error. Generally, neither law nor regulations make allowance for errors either of omission or commission on part of bidders. In case of error in extension of prices in the bid, the unit price shall govern

§ 4.4 MODIFICATION OR WITHDRAWAL OF BID

§ 4.4.1 A Bid may not be modified, withdrawn or canceled by the Bidder during the stipulated time period following the time and date designated for the receipt of Bids, and each Bidder so agrees in submitting a Bid.

§ 4.4.2 Prior to the time and date designated for receipt of Bids, a Bid submitted may be modified or withdrawn by notice to the party receiving Bids at the place designated for receipt of Bids. Such notice shall be in writing over the signature of the Bidder. Written confirmation over the signature of the Bidder shall be received, and date- and time-stamped by the receiving party on or before the date and time set for receipt of Bids. A change shall be so worded as not to reveal the amount of the original Bid.

§ 4.4.3 Withdrawn Bids may be resubmitted up to the date and time designated for the receipt of Bids provided that they are then fully in conformance with these Instructions to Bidders.

§ 4.4.4 Bid security shall be in an amount sufficient for the Bid as resubmitted.
§ 4.4.5 No Bidder shall modify, withdraw or cancel his Bid, or any part thereof, for sixty (60) days after the receipt of Bids.

ARTICLE 5 CONSIDERATION OF BIDS
§ 5.1 OPENING OF BIDS
At the discretion of the Owner, if stipulated in the Advertisement or Invitation to Bid, the properly identified Bids received on time will be publicly opened and will be read aloud. An abstract of the Bids may be made available to Bidders.

§ 5.2 REJECTION OF BIDS
The Owner shall have the right to reject any or all Bids. A Bid not accompanied by a required bid security or by other data required by the Bidding Documents, or a Bid which is in any way incomplete or irregular is subject to rejection.

§ 5.2.1 The Owner may make such investigations as he deems necessary to determine the ability of the Bidder to perform the Work, and prospective Bidders may be required to furnish evidence of performance of similar projects of this magnitude and complication and all such information and data as requested. The Owner reserves the right to reject any bid if evidence submitted by, or investigation of, such Bidder fails to satisfy the Owner that such Bidder is properly qualified to carry out obligations of the Contract and to complete the Work contemplated therein.

§ 5.2.2 Conditional Bids will not be accepted.

§ 5.2.3 The Owner also reserves the right to reject the bid of any Bidder who has previously failed to perform properly or complete on time, contracts of a similar nature, who is not in position to perform the contract, or who has habitually and without just cause neglected the payment of bills or otherwise disregarded his obligations to Subcontractors, material, men, or employees. In determining the lowest responsible Bidder the following elements, in addition to those above mentioned, will be considered, whether the Bidder involved:
   1. Maintains a place of business
   2. Has adequate plant equipment to do the work properly and expeditiously,
   3. Has suitable financial status to meet the obligations incidental to the work
   4. Has appropriate technical experience.

§ 5.2.4 The Bidder will be required to establish to the satisfaction of the Owner the reliability and responsibility of the proposed Subcontractors and perform the Work described in the Bidding Documents pertaining to such proposed Subcontractors’ respective trades.

§ 5.3 ACCEPTANCE OF BID (AWARD)
§ 5.3.1 It is the intent of the Owner to award a Contract to the lowest qualified Bidder provided the Bid has been submitted in accordance with the requirements of the Bidding Documents and does not exceed the funds available. 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 own best interests. In the event of tie bids where all factors are equal, award shall be made to the Washington County Bidder, the out-of-County Bidder, the Bidder incorporated in Maryland, and the Bidder not incorporated in the state of Maryland, in that order of preference. If bidders within these geographical designations are equal as all factor of consideration the award shall be made by a coin toss.

§ 5.3.2 The Owner shall have the right to accept Alternates in any order or combination and to determine the low Bidder on the basis of the sum of the Base Bid 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, a properly executed AIA Document A305, Contractor’s Qualification Statement, unless such a Statement has been previously required and submitted as a prerequisite to the issuance of Bidding Documents.

(Paragraphs deleted)
§ 6.3 SUBMITTALS

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

.1 a designation of the Work to be performed with the Bidder’s own forces;
.2 names of the manufacturers, products, and the suppliers of principal items or systems of materials and equipment proposed for the Work; 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 in writing 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, (1) withdraw the Bid or (2) submit an acceptable substitute person or entity with an adjustment in the Base Bid or Alternate Bid to cover 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 The Bidder shall furnish bonds covering the faithful performance of the Contract and payment of all obligations arising thereunder. Bonds may be secured through the Bidder’s usual sources. Firm issuing bonds must be an A-rated or above bond company (A.M. Best rating) and be on the United States Treasury list and be licensed to do business in the State of Maryland.

§ 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 If the Owner requires that bonds be secured from other than the Bidder’s usual sources, changes in cost will be adjusted as provided in the Contract Documents.

§ 7.1.4 Bid Bond shall be in the amount of five percent (5%) of the total Bid and shall be submitted with the Washington County Board of Education as the sole obligee and shall be issued for a period of sixty (60) calendar days from the receipt of Bids.

§ 7.1.5 The Contractor’s Performance Bond and Payment Bond shall be supplied in the amount of 100% of the value of the total contracted work and shall be submitted with the Washington County Board of Education as the sole obligee.

§ 7.1.6 The Owner shall require within ten (10) days after Notice of Award of the Contract, the selected bidder to furnish PERFORMANCE BOND AND LABOR AND MATERIAL PAYMENT BOND in the amount of not less than (100%) of the total amount of the contract covering the faithful performance of the Contract and the payment of all obligations arising thereunder in such form and amount as specified in the Specifications. Unless otherwise approved by the Owner, obtain bonds from same surety that furnished bid security. The premiums for said bonds shall be paid by the Bidder. Obtaining of bonds by the selected bidder shall be a condition precedent to effectuation of the Contract between the Owner and the selected bidder.

§ 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 be commenced prior thereto 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 The bonds shall be written on AIA Document A312, Performance Bond and Payment Bond. Both bonds shall be written in the amount of the Contract Sum.

§ 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 thereto a certified and current copy of the power of attorney indicating the monetary limit of such power.

ARTICLE 8 FORM OF AGREEMENT BETWEEN OWNER AND CONTRACTOR

The Agreement for the Work will be written on AIA Document A101, as amended by the Board of Education of Washington County, Standard Form of Agreement Between Owner and Contractor Where the Basis of Payment Is a Stipulated Sum.

ARTICLE 9 MISCELLANEOUS

§ 9.1 OBJECTION OF AWARD

Any company objecting to the RFP procedure or the recommendation for award has five (5) business days following the date of award by the Board of Education to file a written protest with the Superintendent of Schools. It is the company’s responsibility to ascertain and confirm the date/time of the pertinent Board Meeting. The written appeal must be submitted on company letterhead, dated and signed by the senior officer in the company. The protest letter must include a request for review and ruling by WCPS, a detailed statement of the legal and factual grounds for the protest, including the resulting prejudice to the company, copies of relevant documents, and a statement of the form of relief being requested. Failure to comply with these instructions may result in the protest being deemed "not filed." Bid protests received later than five (5) days of the Board Meeting will result in the protest being deemed "not timely." The WCPS will not respond or address bid protests that do not conform to these instructions.

§ 9.2 EMARYLAND MARKETPLACE

All bidders are strongly encouraged to register on the State of Maryland’s eMaryland Marketplace web portal to facilitate WCPS’ compliance to State law. For registration requirements, visit www.emarylandmarketplace.com to join Maryland’s gateway to bidding opportunities throughout the State. Effective June 1, 2008, public school systems in Maryland are required to publish notices of procurements and procurement awards on eMaryland Marketplace. Awards can only be posted to registered companies.
Additions and Deletions Report for
AIA® Document A701™ – 1997

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 16:13:11 on 02/05/2015.

PAGE 1

(Name and location or address):

...

(Name, legal status and address):

Washington County Board of Education
10435 Downsville Pike
Hagerstown, MD 21740

...

TABLE OF ARTICLES

PAGE 2

§ 1.2 Definitions set forth in the General Conditions of the Contract for Construction, AIA Document A201, A201 as modified by the Board of Education of Washington County, or in other Contract Documents are applicable to the Bidding Documents.

§ 1.3 Addenda are written or graphic instruments issued by the Architect prior to the execution of the Contract which modify or interpret the Bidding Documents, including Drawings and Specifications, by additions, deletions, clarifications or corrections. Addenda will become part of the Contract Documents when the Construction Contract is executed.

...

§ 2.1.5 Generally, neither law nor regulations make allowance for negligent errors either of omission or commission on the part of the bidders. Each Bidder, by making his Bid, represents that he has read and understands the Bidding Documents. Failure of the Bidder to thoroughly understand all aspects of the Solicitation before submitting his Bid will not act as an excuse to permit withdrawal of his Bid nor secure relief on plea of error.

§ 2.1.6 Once the Contract is awarded to the successful Bidder, no claims for any extra work will be allowed because of alleged impossibilities in the production of the results specified, or because of inadequate or improper plans or specifications, and whenever a result is required, the successful Bidder shall furnish any and all extras and make any changes needed to produce, to the satisfaction of the Owner, the required results.
§ 2.1.7 The Bidder shall warrant that no person or selling agency has been employed or retained to solicit or secure the Contract upon an agreement of understanding for a commission or percentage, brokerage or contingent fee excepting bona fide employees or bona fide established commercial or selling agencies maintained by the bidder for the purpose of securing business. For breach or violation of the warrantee the Owner shall have the right to annul the Contract without liability or at its discretion to deduct from the contract price or otherwise recover the full amount of such commission, percentage, brokerage, or contingent.

§ 2.1.8 The Bidder, by the submission of this Bid agrees as a supplier of good, materials, equipment, or services covered by this Bid or the Contract that he will not discriminate in the employment in any way against any person or persons because of their race, creed, color, sex, national origin, age, or handicap. The Owner does not discriminate on the basis of race, color, sex, age, national origin, religion, or disability.

SECTION 3

§ 3.1.1 Bidders may obtain complete sets of the Bidding Documents from the issuing office designated in the Advertisement or Invitation to Bid in the number and for the deposit sum, if any, stated therein. The deposit will be refunded to Bidders who submit a bona fide Bid and return the Bidding Documents in good condition within ten days after receipt of Bids. The cost of replacement of missing or damaged documents will be deducted from the deposit. A Bidder receiving a Contract award may retain the Bidding Documents and the Bidder’s deposit will be refunded.

Either a CD on which all of the Bidding Documents have been scanned or one (1) hard copy set of Bidding Documents will be issued to each bona fide bidder.

§ 3.2.4 Questions shall be in writing and sent to the Owner for interpretation and/or clarification.

§ 3.3.2 No substitution will be considered prior to receipt of Bids unless written request for approval has been received by the Architect at least ten days prior to the date for receipt of Bids. Such requests shall include the name of the material or equipment for which it is to be substituted and a complete description of the proposed substitution including drawings, performance and test data, and other information necessary for an evaluation. A statement setting forth changes in other materials, equipment or other portions of the Work, including changes in the work of other contracts that incorporation of the proposed substitution would require, shall be included. 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. Where less than three (3) manufacturers or products are listed in the Specifications, or the specification lists "Approved Equal" as an acceptable product, the burden of proof of equivalency rests with the Contractor and evidence shall be submitted to the Architect and approved by Architect with final approval to be determined by the Owner. Criteria includes but is not limited to performance, materials, craftsmanship, quality control, certification procedures or requirements, warranty, installation procedures, etc. Any proposed substitution, or proposed equal product, must be submitted to the Architect for review, 10 days prior to the bid date. After the receipt of bids and award of the Contract, the Owner and Architect are under no obligation to review or approve requests for substitution or equal products that were not specifically mentioned in the Specifications. The Owner reserves the right to request a substitute at any time in the project.

SECTION 4

§ 4.1.4 Interlineations, alterations and erasures must be initialed by the signer of the Bid.

§ 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
§ 4.1.8 The contractor or subcontractor shall use or supply American steel products in performance of this Contract in accordance with the Annotated Code of Maryland, State Finance and Procurement Article 17-301 – 17-306 as implemented in the Code of Maryland Regulations (COMAR) 21.11.02.

§ 4.2.1 Each Bid shall be accompanied by a bid security in the form and amount required if so stipulated in the Instructions to Bidders, required. The Bidder pledges to enter into a Contract with the Owner on the terms stated in the Bid and will, if required, will 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, bonds, the amount of the bid security shall be forfeited to the Owner as liquidated damages, not as a penalty. The amount of the bid security shall not be forfeited to the Owner in the event the Owner fails to comply with Section 6.2. successful Bidder, upon his failure or refusal to execute and deliver the bonds required in Article 7 within ten (10) days after Notice of Award of the Contract shall forfeit to the Owner, as liquidated damages for such failure or refusal, the security deposited with his Bid.

§ 4.2.1.1 Bid bond shall be in the amount of five percent (5%) of the total Bid and shall be submitted with the Washington County Board of Education as the sole obligee and shall be issued for a period of sixty (60) calendar days from the receipt of Bids.

§ 4.2.2 If a surety bond is required, it Surety bond shall be written on AIA Document A310, Bid Bond, unless otherwise provided in the Bidding Documents. Bond 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 the power of attorney.

PAGE 5

§ 4.3.1 All copies of the Bid, the bid security, if any, 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. Submit the Standard Form of Proposal and required documents in duplicate.

§ 4.3.5 All prospective bidders must be currently pre-qualified with the WCPS Purchasing Department to be eligible to participate in the bidding process.

§ 4.3.6 Upon request of the Owner, Bidders should be prepared to provide a list of major subcontractors after submission of bids and within two (2) business days of the request.

§ 4.3.7 Errors in bids: Bidders or their authorized representatives are expected to read and review the bid solicitation documents in order to inform themselves as to the conditions, requirements, and specifications before they submit bids: failure to do so will be at the bidder’s own risk and the bidder cannot secure relief from the plea of error. Generally, neither law nor regulations make allowance for errors either of omission or commission on part of bidders. In case of error in extension of prices in the bid, the unit price shall govern.

§ 4.4.4 Bid security, if required, security shall be in an amount sufficient for the Bid as resubmitted.

§ 4.4.5 No Bidder shall modify, withdraw or cancel his Bid, or any part thereof, for sixty (60) days after the receipt of Bids.
§ 5.2.1 The Owner may make such investigations as he deems necessary to determine the ability of the Bidder to perform the Work, and prospective Bidders may be required to furnish evidence of performance of similar projects of this magnitude and complication and all such information and data as requested. The Owner reserves the right to reject any bid if evidence submitted by, or investigation of, such Bidder fails to satisfy the Owner that such Bidder is properly qualified to carry out obligations of the Contract and to complete the Work contemplated therein.

§ 5.2.2 Conditional Bids will not be accepted.

§ 5.2.3 The Owner also reserves the right to reject the bid of any Bidder who has previously failed to perform properly or complete on time, contracts of a similar nature, who is not in position to perform the contract, or who has habitually and without just cause neglected the payment of bills or otherwise disregarded his obligations to Subcontractors, material, men, or employees. In determining the lowest responsible Bidder the following elements, in addition to those above mentioned, will be considered, whether the Bidder involved:

1. Maintains a place of business
2. Has adequate plant equipment to do the work properly and expeditiously,
3. Has suitable financial status to meet the obligations incidental to the work
4. Has appropriate technical experience.

§ 5.2.4 The Bidder will be required to establish to the satisfaction of the Owner the reliability and responsibility of the proposed Subcontractors and perform the Work described in the Bidding Documents pertaining to such proposed Subcontractors’ respective trades.

§ 5.3.1 It is the intent of the Owner to award a Contract to the lowest qualified Bidder provided the Bid has been submitted in accordance with the requirements of the Bidding Documents and does not exceed the funds available. 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 own best interests. In the event of tie bids where all factors are equal, award shall be made to the Washington County Bidder, the out-of-County Bidder, the Bidder incorporated in Maryland, and the Bidder not incorporated in the state of Maryland, in that order of preference. If bidders within these geographical designations are equal as all factor of consideration the award shall be made by a coin toss.

§ 5.3.2 The Owner shall have the right to accept Alternates in any order or combination, unless otherwise specifically provided in the Bidding Documents, combination and to determine the low Bidder on the basis of the sum of the Base Bid and Alternates accepted.

...
from the receipt of Bids.

§ 7.1.5 The Contractors Performance Bond and Payment Bond shall be supplied in the amount of 100% of the value of the total contracted work and shall be submitted with the Washington County Board of Education as the sole obligee.

§ 7.1.6 The Owner shall require within ten (10) days after Notice of Award of the Contract, the selected bidder to furnish PERFORMANCE BOND AND LABOR AND MATERIAL PAYMENT BOND in the amount of not less than (100%) of the total amount of the contract covering the faithful performance of the Contract and the payment of all obligations arising there-under in such form and amount as specified in the Specifications. Unless otherwise approved by the Owner, obtain bonds from same surety that furnished bid security. The premiums for said bonds shall be paid by the Bidder. Obtaining of bonds by the selected bidder shall be a condition precedent to effectuation of the Contract between the Owner and the selected bidder.

PAGE 8

§ 7.2.2 Unless otherwise provided, the The bonds shall be written on AIA Document A312, Performance Bond and Payment Bond. Both bonds shall be written in the amount of the Contract Sum.

...

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

...

Unless otherwise required in the Bidding Documents, the The Agreement for the Work will be written on AIA Document A101, as amended by the Board of Education of Washington County, Standard Form of Agreement Between Owner and Contractor Where the Basis of Payment Is a Stipulated Sum.

ARTICLE 9 MISCELLANEOUS

§ 9.1 OBJECTION OF AWARD

Any company objecting to the RFP procedure or the recommendation for award has five (5) business days following the date of award by the Board of Education to file a written protest with the Superintendent of Schools. It is the company’s responsibility to ascertain and confirm the date/time of the pertinent Board Meeting. The written appeal must be submitted on company letterhead, dated and signed by the senior officer in the company. The protest letter must include a request for review and ruling by WCPS, a detailed statement of the legal and factual grounds for the protest, including the resulting prejudice to the company, copies of relevant documents, and a statement of the form of relief being requested. Failure to comply with these instructions may result in the protest being deemed "not filed." Bid protests received later than five (5) days of the Board Meeting will result in the protest being deemed "not timely." The WCPS will not respond or address bid protests that do not conform to these instructions.

§ 9.2 EMARYLAND MARKETPLACE

All bidders are strongly encouraged to register on the State of Maryland’s eMaryland Marketplace web portal to facilitate WCPS’ compliance to State law. For registration requirements, visit www.emarylandmarketplace.com to join Maryland’s gateway to bidding opportunities throughout the State. Effective June 1, 2008, public school systems in Maryland are required to publish notices of procurements and procurement awards on eMaryland Marketplace. Awards can only be posted to registered companies.
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 16:13:11 on 02/05/2015 under Order No. 3528535459_1 from AIA Contract Documents software and that in preparing the attached final document I made no changes to the original text of AIA® Document A701™ – 1997, Instructions to Bidders, as published by the AIA in its software, other than those additions and deletions shown in the associated Additions and Deletions Report.

(Signed)

(Title)

(Dated)
SECTION 00 43 13

AIA DOCUMENT A310-2010

BID BOND
CONTRACTOR:
(Name, legal status and address)

SURETY:
(Name, legal status and principal place of business)

OWNER:
(Name, legal status and address)

BOND AMOUNT:

PROJECT:
(Name, location or address, and Project number, if any)

The Contractor and Surety are bound to the Owner in the amount set forth above, for the payment of which the Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, as provided herein. The conditions of this Bond are such that if the Owner accepts the bid of the Contractor within the time specified in the bid documents, or within such time period as may be agreed to by the Owner and Contractor, and the Contractor either (1) enters into a contract with the Owner in accordance with the terms of such bid, and gives such bond or bonds as may be specified in the bidding or Contract Documents, with a surety admitted in the jurisdiction of the Project and otherwise acceptable to the Owner, for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof; or (2) pays to the Owner the difference, not to exceed the amount of this Bond, between the amount specified in said bid and such larger amount for which the Owner may in good faith contract with another party to perform the work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect. The Surety hereby waives any notice of an agreement between the Owner and Contractor to extend the time in which the Owner may accept the bid. Waiver of notice by the Surety shall not apply to any extension exceeding sixty (60) days in the aggregate beyond the time for acceptance of bids specified in the bid documents, and the Owner and Contractor shall obtain the Surety’s consent for an extension beyond sixty (60) days.

If this Bond is issued in connection with a subcontractor’s bid to a Contractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

When this Bond has been furnished to comply with a statutory or other legal requirement in the location of the Project, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.
Signed and sealed this day of ,

(C) (S)

(W) (T)

(S) (S)

(W) (T)
Additions and Deletions Report for
AIA® Document A310™ – 2010

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 10:58:13 on 01/03/2012.

There are no differences.
Certification of Document’s Authenticity
AIA® Document D401™ – 2003

I, Robert H. Rollins, III, 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 10:58:13 on 01/03/2012 under Order No. 4786269459_1 from AIA Contract Documents software and that in preparing the attached final document I made no changes to the original text of AIA® Document A310™ – 2010, Bid Bond, as published by the AIA in its software, other than those additions and deletions shown in the associated Additions and Deletions Report.

(Signed)

(Title)

(Dated)
SECTION 00 43 39

MBE PROCEDURES
MINORITY BUSINESS ENTERPRISE PROCEDURES
FOR
STATE FUNDED
PUBLIC SCHOOL CONSTRUCTION PROJECTS
Revised JUNE 2008
With Amendments Revised SEPTEMBER and OCTOBER 2008

Approved by the Washington County Board of Education on September 4, 2008, with amendments approved by the Washington County Board of Education on November 6, 2008.

These procedures supersede the latest procedures which were previously approved on June 21, 2005.

DATE OF ORIGINAL APPROVAL: June 21, 2005
DATE OF APPROVAL OF REVISION: September 4, 2008
DATE OF APPROVAL OF AMENDMENTS: November 6, 2008

These model procedures were approved by the Interagency Committee on School Construction on June 26, 2008, with amendments approved on September 18 and October 15, 2008 and are consistent with the State's MBE policy in COMAR 21.11.03. The county board has adopted these model procedures and amendments, or other procedures that have been determined to be consistent with the requirements of COMAR 21.11.03, as the official policy of the Board of Education. If the county board adopts procedures other than the IAC model procedures and amendments, the procedures should include a certification by legal counsel that the adopted procedures are consistent with COMAR 21.11.03.

The procedures adopted by the county board shall be utilized by the Washington County Board of Education as a condition for the receipt of State funds through the Public School Construction Program.

The effective date for implementation of these procedures for projects in Washington County is November 14, 2008.

[Signature]

Elizabeth M. Morgan, Ph.D., / Date
Superintendent of Washington County Public Schools
Secretary to the Washington County Board of Education
# MINORITY BUSINESS ENTERPRISE PROCEDURES FOR STATE FUNDED PUBLIC SCHOOL CONSTRUCTION PROJECTS

## TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>SUBJECT HEADING</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>BACKGROUND</td>
<td>1</td>
</tr>
<tr>
<td>OVERVIEW</td>
<td>1</td>
</tr>
<tr>
<td>1.0 PURPOSE</td>
<td>1</td>
</tr>
<tr>
<td>2.0 EFFECTIVE DATE</td>
<td>2</td>
</tr>
<tr>
<td>3.0 DEFINITIONS</td>
<td>2</td>
</tr>
<tr>
<td>4.0 MBE GOAL SETTING PROCEDURES</td>
<td>4</td>
</tr>
<tr>
<td>5.0 IMPLEMENTING PROCEDURES - $50,000 OR LESS</td>
<td>5</td>
</tr>
<tr>
<td>6.0 IMPLEMENTING PROCEDURES - OVER $50,000</td>
<td>6</td>
</tr>
<tr>
<td>1. ADVERTISEMENTS, SOLICITATIONS AND SOLICITATION DOCUMENTS</td>
<td>6</td>
</tr>
<tr>
<td>2. OTHER ADVERTISEMENT AND OUTREACH REQUIREMENTS</td>
<td>7</td>
</tr>
<tr>
<td>3. ALL SOLICITATION DOCUMENTS SHALL INCLUDE</td>
<td>7</td>
</tr>
<tr>
<td>4. WAIVER PROCEDURES</td>
<td>9</td>
</tr>
<tr>
<td>5. ALL CONTRACTS SHALL INCLUDE</td>
<td>10</td>
</tr>
<tr>
<td>6. PROJECTS UTILIZING A CONSTRUCTION MANAGER DELIVERY METHOD</td>
<td>12</td>
</tr>
<tr>
<td>7. PROJECTS UTILIZING AN INDEFINITE DELIVERY/INDEFINITE QUANTITY (IDIQ) OR JOB ORDER CONTRACT (JOC) DELIVERY METHOD</td>
<td>13</td>
</tr>
<tr>
<td>8. PROJECTS UTILIZING THE DESIGN/BUILD DELIVERY METHOD</td>
<td>13</td>
</tr>
<tr>
<td>7.0 RECORDS AND REPORTS</td>
<td>14</td>
</tr>
<tr>
<td>8.0 MONITORING</td>
<td>15</td>
</tr>
<tr>
<td>9.0 MINORITY BUSINESS ENTERPRISE LIAISON</td>
<td>16</td>
</tr>
</tbody>
</table>

## ATTACHMENTS

<table>
<thead>
<tr>
<th>ATTACHMENT</th>
<th>DESCRIPTION</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>CERTIFIED MINORITY BUSINESS ENTERPRISE UTILIZATION AND FAIR SOLICITATION AFFIDAVIT</td>
<td>A-1</td>
</tr>
<tr>
<td>B</td>
<td>MBE PARTICIPATION SCHEDULE</td>
<td>B-1</td>
</tr>
<tr>
<td>C</td>
<td>OUTREACH EFFORTS COMPLIANCE STATEMENT</td>
<td>C-1</td>
</tr>
<tr>
<td>D</td>
<td>MINORITY BUSINESS ENTERPRISES SUBCONTRACTOR PROJECT PARTICIPATION STATEMENT</td>
<td>D-1</td>
</tr>
<tr>
<td>E</td>
<td>MINORITY SUBCONTRACTOR UNAVAILABILITY CERTIFICATE</td>
<td>E-1</td>
</tr>
<tr>
<td>F</td>
<td>MBE WAIVER DOCUMENTATION</td>
<td>F-1</td>
</tr>
<tr>
<td>G</td>
<td>STANDARD MONTHLY CONTRACTOR’S REQUISITION FOR PAYMENT (IAC/PSCP FORM 306.4, PAGE 3 OF 16)</td>
<td>G-1</td>
</tr>
<tr>
<td>H</td>
<td>CLOSE-OUT COST SUMMARY (IAC/PSCP FORM 306.6)</td>
<td>H-1</td>
</tr>
</tbody>
</table>
MINORITY BUSINESS ENTERPRISE PROCEDURES FOR STATE FUNDED PUBLIC SCHOOL CONSTRUCTION PROJECTS

BACKGROUND

In 1978, the Maryland General Assembly passed legislation, which was signed into law to establish the State’s Minority Business Enterprise Program. This new law set as a goal that at least 10 percent of each unit of State government’s total dollar value of procurement contracts for purchases and/or contracts be awarded to minority business enterprises. This law was subsequently modified and the goal was increased to 14 percent. More recently, in 2001, the goal was increased to 25 percent with subcontracting sub-goals of 7 percent for certified African American-owned businesses and 10 percent for certified women-owned businesses.

In 1979, the Rules, Regulations, and Procedures for the Administration of the School Construction Program were revised by the Board of Public Works to require each local board of education to adopt procedures to attempt to include minority business enterprises in State funded school construction projects. The State law was revised and now states: “The Interagency Committee on School Construction (IAC) shall require each local board of education to adopt procedures consistent with this chapter before obtaining funds for public school construction projects”.

In May 2007, the Rules, Regulations, and Procedures were replaced by regulations. The regulations concerning project procurement (COMAR 23.03.03) indicate that the State’s minority business enterprise goals and procedures apply to all State funded projects, irrespective of procurement method.

OVERVIEW

This Minority Business Enterprise (MBE) procedure document was originally developed in response to a requirement set forth in the Rules, Regulations, and Procedures for the Administration of the School Construction Program. The MBE requirement was originally established under HB 64, which was passed in the 1978 session of the Maryland General Assembly and signed into law as Chapter 575 of the Acts of 1978.

Since the Board adopted its original Minority Business Enterprise Procedures, there have been changes in State statutes, regulations adopted by the Board of Public Works, procedural requirements, project eligibility requirements and the level of State participation in school construction projects. This revised procedure is consistent with current legislation and the changes to the Code of Maryland Regulations (COMAR) requirements, effective November 7, 2005 and May 21, 2007.

1.0 PURPOSE

The purpose of the Procedures is to fulfill the intent of the law by setting goals for minority business enterprise participation in every contract that includes State funding through the Public School Construction Program. Local Educational Agencies (LEAs) shall attempt to achieve the result that a minimum of 25 percent of the total dollar value of all construction contracts is made directly or indirectly with certified minority business enterprises when State Public School Construction Program (PSCP) funds are utilized, with a minimum of 7 percent from certified African American-owned businesses, a minimum of 10 percent from certified women-owned businesses, and the balance from any certified minority business enterprises. All general contractors, including certified MBE firms, when bidding as general or prime contractors are required to attempt to achieve the MBE subcontracting goals from certified MBE firms.
2.0 EFFECTIVE DATE

These procedures have been adopted for use in Washington County and supersede previously utilized MBE procedures, and will take effect on or after November 14, 2008.

3.0 DEFINITIONS

1. Certification means the determination that a legal entity is a minority business enterprise consistent with the intent of Subtitle 3 of the State Finance and Procurement Article.

2. Certified Minority Business Enterprise means a minority business that holds a certification issued by the Maryland State Department of Transportation (MDOT).

3. Corporation, as defined by MDOT, is an artificial person or legal entity created by or under the authority of the laws of any state of the United States, the District of Columbia or a territory or commonwealth of the United States and formed for the purpose of transacting business in the widest sense of that term, including not only trade and commerce, but also manufacturing, mining, banking, insurance, transportation and other forms of commercial or industry activity where the purpose of the organization is profit. For eligibility for certification, disadvantaged and/or minority individuals must own at least 51 percent of the voting stock and at least 51 percent of the aggregate of all classes of stock that have been issued by the corporation. (Note: stock held in trust is not considered as stock held by the disadvantaged businesspersons when computing the business person(s) ownership.)

4. Managerial Control, as defined by MDOT, means that a disadvantaged or minority owner(s) has the demonstrable ability to make independent and unilateral business decisions needed to guide the future and destiny of a business.

Control may be demonstrated in many ways. For a minority owner to demonstrate control, the following examples are put forth, but are not intended to be all inclusive:

a. Articles of Incorporation, Corporate Bylaws, Partnership Agreements and other agreements shall be free of restrictive language which would dilute the minority owner’s control thereby preventing the minority owner from making those decisions which affect the destiny of a business;

b. The minority owner shall be able to show clearly through production of documents the areas of the disadvantaged business owner’s control, such as, but not limited to:

   1) Authority to sign payroll checks and letters of credit;
   2) Authority to negotiate and sign for insurance and/or bonds;
   3) Authority to negotiate for banking services, such as establishing lines of credit; and
   4) Authority to negotiate and sign for contracts.

c. Agreements for support services that do not lessen the minority owner’s control of the company are permitted as long as the disadvantaged or minority business owner’s authority to manage the company is not restricted or impaired.

5. Minority Business Enterprise (MBE) means any legal entity, except a joint venture, that is (a) organized to engage in commercial transactions, and (b) at least 51 percent owned and controlled by one or more individuals who are socially and economically disadvantaged including:

   African Americans;
   American Indian/Native Americans;
   Asians;
Hispanics;
Physically or mentally disabled individuals;
Women; or
A non-profit entity organized to promote the interests of physically or mentally
disabled individuals.

6. **Minority Business Enterprise Liaison** means the employee of the school system designated to administer the Minority Business Enterprise Procedures for State funded public school construction projects.

7. **Operational Control**, as defined by MDOT, means that the disadvantaged or minority owner(s) must possess knowledge necessary to evaluate technical aspects of the business entity. The primary consideration in determining operational control and the extent to which the disadvantaged or minority owner(s) actually operates a business will rest upon the specialties of the industry of which the business is a part. The minority owner should have a working knowledge of the technical requirements needed to operate in his/her industry. Specifically, in the construction industry and especially among small (one to five person firms) contractors, it is reasonable to expect the disadvantaged or minority owner(s) to be knowledgeable of all aspects of the business. Accordingly, in order to clarify the level of operational involvement which a minority owner must have in a business for it to be considered eligible, the following examples are put forth, but are not intended to be all inclusive:

a. The minority owner should have experience in the industry for which certification is being sought; and
b. The minority owner should demonstrate that basic decisions pertaining to the daily operations of the business are independently made. This does not necessarily preclude the disadvantaged or minority owner(s) from seeking paid or unpaid advice and assistance. It does mean that the minority owner currently must possess the knowledge to weigh all advice given and to make an independent determination.

8. **Ownership**, as defined by MDOT, means that:

a. The minority owner(s) of the firm shall not be subject to any formal or informal restrictions, which limit the customary discretion of the owner(s). There shall be no restrictions through, for example, charter requirements, by-law provisions, partnership agreements, franchise or distributor agreements or any other agreements that prevent the minority owner(s), without the cooperation or vote of any non-minority, from making a business decision of the firm.
b. This means that the disadvantaged or minority persons, in order to acquire their ownership interests in the firm, have made real and substantial contributions of capital, expertise or other tangible personal assets derived from independently owned holdings without benefit of a transfer of assets, gift or inheritance from non-minority persons. Examples of insufficient contributions include a promise to contribute capital, a note payable to the firm or its owners who are not minority persons or the mere participation as an employee rather than as a manager. If the ownership interest held by a disadvantaged or minority person is subject to formal or informal restrictions, such as options, security interests, agreements, etc., held by a non-minority person or business entity, the options, security interests, agreements, etc., held by the non-minority person or business entity must not significantly impair the disadvantaged or minority person’s ownership interest.

9. **Partnership** means an unincorporated association of two or more persons to carry on as co-owners of a business for profit. For a partnership to be deemed eligible for certification under the MDOT Program, the disadvantaged or minority person’s interest must be at least 51 percent of the partnership capital.
10. **Socially and Economically Disadvantaged** means a citizen or lawfully admitted permanent resident of the United States who is socially disadvantaged and economically disadvantaged. The law establishes the level of personal net worth at $1,500,000, above which an individual may not be found to be socially and economically disadvantaged.

11. **Sole Proprietorship**, as defined by MDOT, is a for-profit business owned and operated by a disadvantaged or minority person in his or her individual capacity. For a sole proprietorship to be deemed eligible for certification under the DBE/MBE Program, the disadvantaged or minority person must be the sole proprietor.

### 4.0 MBE GOAL SETTING PROCEDURES

1. The MBE program requires that all race-neutral measures be considered before making use of race-based measures. Using a combination of race-neutral and race-based measures for each specific school construction project will help ensure that certified MBE firms are afforded the opportunity to submit bids and be utilized to the greatest extent possible.

2. Race-neutral measures include any action taken by the LEA to make it easier for all contractors, including MBEs, to compete successfully for public school construction project contracts.

3. Race-based measures include setting an overall MBE goal and MBE subgoals, if applicable, based upon race, gender, ethnicity, etc., for a specific project.

4. The overall MBE goal and the subgoals, if applicable, should be set for each specific project, considering but not limited to, the following factors:

   a. The extent to which the work to be performed can reasonably be segmented to allow for MBEs to participate in the project;
   b. A determination of the number of certified MBEs that potentially could perform the identified work;
   c. The geographic location of the project in relationship to the identified certified MBEs;
   d. Information obtained from other State departments/agencies related to establishing a MBE goal and/or subgoals for similar construction projects or work in the jurisdiction;
   e. Information obtained from other State departments/agencies related to MBE participation in similar construction projects or work in the jurisdiction; and
   f. Any other activities or information that may be identified as useful and productive.

5. The Superintendent or designee shall establish one or more Procurement Review Groups (PRG). The PRG must include at a minimum the MBE Liaison and the Procurement Officer (P.O.) or a representative from the Procurement Office. The PRG could also include a capital improvement project manager, the project architect, the cost estimator, the construction manager, and/or other individuals selected by the Superintendent or designee.

   a. The PRG should communicate and/or meet as needed to consider the MBE subcontracting goal and subgoals, if applicable, for individual projects or groups of projects.
   b. The PRG should consider the factors cited in 4 above when establishing the MBE goal and subgoals, if applicable, for each project or segmented piece of a project that are reasonable and attainable.
   c. The PRG must complete and submit a written analysis for each state-funded school construction project with an estimated cost that is expected to exceed $200,000.
For state-funded projects that require review of construction documents (CD), the written analysis shall be submitted with the CD documents to the Department of General Services, and will be reviewed by DGS for submission, appropriate signatures, and correspondence between the goal and subgoals, if applicable, indicated in the analysis and those of the procurement documents.

For state-funded projects that do not require review of construction documents, the written analysis shall be submitted to the Public School Construction Program, and will be reviewed by the PSCP for submission and appropriate signatures.

For locally funded projects that are anticipated to be requested for state approval or planning and funding, the written analysis shall be submitted with the CD documents to the Maryland State Department of Education, and will be reviewed by MSDE for submission, appropriate signatures, and correspondence between the goal and subgoals, if applicable, indicated in the analysis and those of the procurement documents. Submission of this document is a pre-condition for recommendation for state approval of planning and funding when submitted in an annual CIP.

d. For projects estimated to cost between $50,000 and $200,000 the same analysis form is to be completed and submitted. This could be a responsibility of the PRG, but could be performed by others as well.

i. For state-funded projects that require review of construction documents (CD), the written analysis shall be submitted with the CD documents to the Department of General Services, and will be reviewed by DGS for submission, appropriate signatures, and correspondence between the goal and subgoals, if applicable, indicated in the analysis and those of the procurement documents.

ii. For state-funded projects that do not require review of construction documents, the written analysis shall be submitted to the Public School Construction Program, and will be reviewed by the PSCP for submission and appropriate signatures.

e. If the project cost is estimated to exceed $200,000 then a copy of the written analysis shall also be sent to GOMA at the same time that the written analysis is submitted to the DGS of the PSCP.

f. The PRG should consult with local counsel for the Board of Education as needed.

6. It is recognized that by utilizing the factors cited in 4 above, the MBE goal and/or subgoals, if applicable, for a specific project or portion thereof may be significantly higher than the overall goals of the program (25% overall, with 7% from African American-owned businesses and 10% from women-owned businesses). It is also recognized and possible that there will be MBE goals set that are lower than those stated above or even that no MBE goal and/or subgoals will be set for a specific project or the segmented piece of the project.

7. Assistance in reviewing the factors cited in 4 above and setting a goal and/or subgoals, if applicable, for specific projects or a segmented piece of a project can be obtained by contacting the Public School Construction Program and/or the Governor’s Office of Minority Affairs.

5.0 IMPLEMENTING PROCEDURES - $50,000 OR LESS

For construction projects estimated to cost $50,000 or less, the following procedures will be utilized
1. A MBE goal and/or MBE subgoals are not required to be set for contracts that are anticipated to be for $50,000 or less.

2. All advertisements, solicitations, and solicitation documents shall include the following statement:
   
a. "Certified Minority Business Enterprises are encouraged to respond to this solicitation."

3. To encourage greater MBE participation the staff of the school system should send out notices of potential projects and a specific project to MBEs to solicit bids or proposals directly from minority business enterprise contractors that are certified.

4. A copy of the solicitation notice, preferably electronically, shall be sent to the Governor’s Office of Minority Affairs at the same time the advertisement for the solicitation is released.

5. When a pre-bid or pre-proposal conference or meeting is held, the MBE liaison or designated representative shall explain that all bidders or offerors are encouraged to utilize certified MBEs for this project or segments of the project.

6. Upon request for a specific project, the school system shall provide one set of drawings and specifications (and addenda when issued) to minority business enterprise associations recognized by the Governor’s Office of Minority Affairs. They will be available free of charge to be picked up at a location designated by the LEA. A review of the bid or proposal activity submitted by an association’s members may be initiated to justify continuation of this service.

7. Minority Business Enterprise forms identified in Section 6.0 of this procedure for projects over $50,000, are not required to be submitted for these projects ($50,000 or less).

8. The names of prime contractors obtaining drawings and specifications will be shared with certified MBEs and MBE associations, upon request.

9. At the time of the contract award, the MBE Liaison or a designated person will record any anticipated certified minority business enterprise participation data made available from the successful contractor.

10. A business that presents itself as a minority business may participate in a project but may not be counted toward MBE participation until it is a certified minority business enterprise. If the MBE is not certified at the time of contract award, it may not be counted at that time. Only the funds paid after MDOT certification can be counted as MBE participation in the project. If a certified MBE fails to meet the standards specified in State Finance and Procurement Article14-301 (G) and (I), Annotated Code of Maryland, the payments made to the MBE can be recorded and counted under a contract entered into when the MBE was eligible and certified. Ineligibility of an MBE to participate in the MBE program may not be the sole cause of the termination of the MBE contractual relationship for the remainder of the term of the contract.

11. The contractor will complete the Standard Monthly Contractor’s Requisition for Payment (IAC/PSCP Form 306.4), specifically page 3 of 16, Minority Business Enterprise Participation, with each requisition submitted for payment. If certified MBE firms are known at the time of contract award their names and other appropriate information should be entered on page 3 of the first and all subsequent requisitions for payment. Any MBEs identified during the life of the project should be added as soon as the contractor engages them.
12. Upon completion of the project the contractor will provide a summary of the total of all funds paid to certified MBE firms. This should be within the contractor’s final requisition for payment.

6.0 IMPLEMENTING PROCEDURES - Over $50,000

For construction projects estimated to cost in excess of $50,000, the following procedures will be utilized:

1. All advertisements, solicitations, and solicitation documents shall include the following statements:
   a. "Certified Minority Business Enterprises are encouraged to respond to this solicitation notice."
   b. "The contractor or supplier who provides materials, supplies, equipment and/or services for this construction project shall attempt to achieve the specific overall MBE goal of ____ percent established for this project. All prime contractors, including certified MBE firms, when submitting bids or proposals as general or prime contractors, are required to attempt to achieve this goal from certified MBE firms."
   c. If subgoals have been established for this project then one of the following should be included:
      1) “The subgoals established for this project are ____ percent from African American-owned businesses and ____ percent from woman–owned businesses.”
      2) “The subgoal established for this project is ____ percent from African American-owned businesses.”
      3) “The subgoal established for this project is ____ percent from woman–owned businesses.”
   d. "The bidder or offeror is required to submit with its bid or proposal a completed Attachment A - Certified MBE Utilization and Fair Solicitation Affidavit and Attachment B - MBE Participation Schedule, as described in the solicitation documents.
   e. If there is no overall MBE goal or MBE subgoals established for the project, then only 1.A. above is to be included.

2. Other Advertisement and Outreach Requirements
   a. To encourage greater MBE participation the staff of the school system should send out notices of potential projects to MBEs or solicit bids or proposals directly from minority business enterprise contractors that are certified.
   b. A copy of the solicitation notice, preferably electronically, shall be sent to the Governor’s Office of Minority Affairs at the same time the advertisement for the solicitation is released.
   c. Upon request for a specific project, the school system shall provide one set of drawings and specifications (and addenda when issued) to minority business enterprise associations recognized by the Governor’s Office of Minority Affairs. They will be available free of charge to be picked up at a location designated by the LEA. A review of the bid or proposal activity by an association’s members may be initiated to justify continuation of this service.
   d. When a pre-bid or pre-proposal conference is held, the MBE Liaison or designated representative shall explain the MBE goal and subgoals, if applicable; the MBE provisions of the solicitation; the documentation required at the time of submission; its relationship to the responsiveness of the bidder or offeror; how to complete the required attachments, particularly A, B, and C; and additional information and supporting documentation that may be required after the bid or proposal opening. All contractors
who attend the pre-bid or pre-proposal conference should receive a list or information explaining how to obtain a listing of certified MBE firms who could perform the work or have expressed an interest in performing the school construction work required for the specific project in the jurisdiction.

e. The names of prime contractors obtaining drawings and specifications will be shared with certified MBEs and MBE associations, upon request.

f. The MBE liaison, in conjunction with the procurement officer or project staff, should respond to all applicable questions and concerns relating to the project’s MBE requirements completely and in a timely fashion to ensure that all potential contractors and subcontractors can compete effectively.

3. All Solicitation Documents Shall Include the Following:

a. “Certified Minority Business Enterprises are encouraged to respond to this solicitation notice”.

b. “The contractor or supplier who provides materials, supplies, equipment and/or services for this construction project shall attempt to achieve the result that a minimum of __ percent of the total contract value is with certified Minority Business Enterprises, with a minimum of __ percent from certified African American-owned businesses, a minimum of __ percent from certified women-owned businesses, and the balance from any certified Minority Business Enterprises. All contractors, including certified MBE firms, when submitting bids or proposals as prime contractors, are required to attempt to achieve the MBE goal and subgoals, if applicable, from certified MBEs”. Note: see 6.1.C. above for variations that may be required.

c. Each bid or offer submitted, including a submittal from a certified MBE in response to this solicitation, shall be accompanied by a completed Attachment A - Certified MBE Utilization and Fair Solicitation Affidavit and a completed Attachment B - MBE Participation Schedule. These two attachments must be accurate and consistent with each other.

1) Attachment A and Attachment B shall be submitted with the sealed bid price or proposal at a place, date, and time specified in the solicitation document.

2) As an alternative, and at the discretion of the school system, Attachment A could be submitted with the sealed bid price or proposal at a place, date, and time specified in the solicitation document. The sealed bids or proposals received by the time specified could be held, unopened for a maximum of 30 minutes. Within that time (30 minutes) each bidder or offeror must submit Attachment B, in a separate sealed envelope. The sealed price envelopes from each bidder or offeror who submits both the sealed bid or proposal and the envelope with Attachment B will then be opened and reviewed and recorded as a viable submission. Any contractor that fails to submit the second envelope, with Attachment B, prior to the specified time allowed (30 minutes) after the submittal of the sealed bid or proposal will be deemed non-responsive and the sealed bid or proposal will not be opened or considered.

d. The submittal of a completed and signed Attachment A - Certified MBE Utilization and Fair Solicitation Affidavit and a completed and signed Attachment B - MBE Participation Schedule indicates the bidder’s or offeror’s recognition and commitment to attempt to achieve the MBE goal and/or MBE subgoals, if applicable, for the specific project.

1) The bidder or offeror recognizes that their efforts made to initiate contact, to solicit, and to include MBE firms in this project will be reviewed carefully and evaluated based upon the actions taken by them prior to and up to 10 days before the bid or proposal opening. Follow-up actions taken by the bidder or offeror within the 10 days prior to the bid opening will also be considered.
2) Based upon this review and evaluation it will be determined, by the MBE liaison, procurement officer, or a designated person, if a good faith effort was made by the apparent low bidder or apparent successful offeror.

e. The bidder or offeror must check one of the three boxes on Attachment A, which relates to the level of MBE participation achieved for the project. The bidder’s or offeror’s signature indicates that in the event that they did not meet the MBE goal or subgoals, if applicable, that:

1) They are therefore requesting a waiver, and
2) Documentation of their good faith efforts will be provided to the school system staff within 10 days of being notified that they are the apparent low bidder or apparent successful offeror.

f. The bidder or offeror must submit Attachment B (as and when described above), which lists and provides information related to each certified MBE firm that the bidder or offeror will utilize on this project. A completed and accurate Attachment B is required. All of the work specified to be performed by each MBE firm, the contact information, MDOT certification number, minority code, the dollar values, and percentages must be correct.

g. Attachment B should be completed and submitted with all calculations utilizing the base bid or offer only. A revised Attachment B should be submitted by the successful bidder or offeror once a determination is made as to the acceptance and/or rejection of any alternates.

h. If a request for a waiver has been made, the appropriate box on Attachment A has been checked and the attachment signed, then the LEA should obtain and review the apparent low bidder’s or successful offeror’s supporting documentation of the good faith efforts to justify the granting of the waiver, prior to submitting the contract award for approval to the board of education.

i. The following documentation shall be considered as part of the contract, and shall be furnished by the apparent low bidder or successful offeror to the MBE Liaison or designated person, within ten (10) working days from notification that the firm is the apparent low bidder or successful offeror:

1) A completed Attachment D - Minority Business Enterprise Subcontractor Project Participation Statement shall be completed and signed by the prime contractor and each MBE firm listed on Attachment B - MBE Participation Schedule and Attachment C - Outreach Efforts Compliance Statement shall be signed and completed by the bidder or offeror.

2) Notification for purposes of this procedure means the earliest of the following methods of communication: orally in person, orally by telephone, orally by a telephone message, a faxed communication, a letter by date received or an electronic communication.

3) The ten (10) working days do not include the day the notification is received, weekends or holidays (State or Federal), but the material submitted must be received by the close of business on the tenth day.

4) The requirement to submit the above-listed documentation within the time frame specified will be considered by the IAC in its review of the request for contract award for the project. Failure to submit the required documentation within the time frame specified may result in a delay of the approval of the award of the contract, or the materials being returned without the approval of the award of the contract.

4. Waiver Procedures

a. If the apparent low bidder or successful offeror has determined that they are unable to meet the overall MBE goal or subgoals, if applicable, for the project at the time of
submission of a bid or offer, they must check either of the two boxes on Attachment A. The signature recognizes and acknowledges that a request for a waiver is being made. The apparent low bidder or successful offeror will therefore be required to submit information and substantiating documentation that will be reviewed to justify the granting of a waiver.

b. If the apparent low bidder or successful offeror is unable to achieve the overall MBE contract goal and/or the MBE subgoals, if applicable, from certified African American-owned businesses and/or from certified women-owned businesses, the apparent low bidder or successful offeror shall submit, within 10 working days from notification that the firm is the apparent low bidder or successful offeror, a completed Attachment C - Outreach Efforts Compliance Statement, Attachment E - Minority Subcontractors Unavailability Certificate, and Attachment F - MBE Waiver Documentation which shall include the following:

1) A detailed statement of the efforts made by the bidder or offeror to identify and select portions of the work proposed to be performed by subcontractors in order to increase the likelihood of achieving the stated goal;
2) A detailed statement of the efforts made by the bidder or offeror prior to and up to at least ten (10) days before the bid or proposal opening to solicit minority business enterprises through written notices that describe the categories of work for which subcontracting is being solicited, the type of work to be performed and specific instructions on how to submit a bid or proposal;
3) Follow-up actions taken by the bidder or offeror within the 10 days prior to the bid or proposal opening will also be considered.
4) A detailed statement of the bidder’s or offeror’s efforts to make personal contact with MBE firms identified for item (2) above;
5) A record of the name, address, telephone number and dates contacted for each MBE identified under items (2) and (3) above;
6) A description of the information provided to MBEs regarding the drawings, specifications and the anticipated time schedule for portions of the work to be performed;
7) Information on activities to assist minority business enterprises to fulfill bonding requirements or to obtain a waiver of these requirements;
8) Information on activities to publicize contracting opportunities to minority business enterprises, attendance at pre-bid or pre-proposal meetings or other meetings scheduled by the MBE Liaison or designated representative; and
9) As to each MBE that placed a subcontract quotation or offer which the apparent low bidder or successful offeror considers not to be acceptable, a detailed statement of reasons for this conclusion.

c. In addition to any waiver documentation the apparent low bidder or successful offeror shall submit one completed Attachment D - Minority Business Enterprise Subcontractor Project Participation statement for each MBE firm that will participate in the project consistent with the information previously provided at the time of the submission of Attachment B or the revised Attachment B.

d. A waiver of an MBE contract goal or subgoal, if applicable, may be granted by the school system only upon receipt of Attachment C - Outreach Efforts Compliance Statement, Attachment E - Minority Subcontractors Unavailability Certificate, and Attachment F - MBE Waiver Documentation as described above in items 1) through 9)

1) The MBE Liaison will review and accept or reject the minority business enterprise material that is submitted, and could obtain legal advice or assistance from their attorney.
2) The MBE waiver request may not be considered unless all of the documentation specified above has been submitted in a timely fashion by the apparent low bidder or successful offeror.
3) Assistance in the review of a request for a waiver (the documentation and justifications) may be requested from the Public School Construction Program and/or the Governor’s Office of Minority Affairs.

4) If a determination is made that the apparent low bidder or successful offeror did make a good faith effort, based upon a review of the documentation submitted, then the waiver must be granted. The award of contract shall then be made. The material and information submitted, including the LEA’s review and analysis notes and conclusion shall be retained in the project file.

5) If a determination is made that the apparent low bidder or successful offeror did not make a good faith effort, based upon a review of the documentation submitted, then the waiver should not be granted. The material and information submitted, including the LEA’s review and analysis notes and conclusion, shall be retained in the project file. The award of contract shall then be made to the next lowest bidder or offeror, who meets the contractual requirements, including the MBE requirements.

6) When a waiver is granted, a copy of Attachment F - MBE Waiver Documentation, accepted and signed by a school system representative and with the reasons for the determination, shall be forwarded to the Governor’s Office of Minority Affairs and the Public School Construction Program within ten (10) days after approval of the contract award by the board of education. Failure to submit the required documentation within the time frame specified may result in delayed approval of the award of contract by the IAC.

5. All Contracts Shall Include The Following:

a. “The contractor shall perform the contract in accordance with the representations made in Attachment A - Certified Minority Business Enterprise Utilization and Fair Solicitation Affidavit and Attachment B - MBE Participation Schedule, submitted as part of the bid or proposal”.

b. “Failure to perform the contract as specified and presented in the bid or proposal submission without prior written consent of the owner shall constitute a violation of a material term of the contract”.

1) The contractor shall structure his/her operations for the performance of the contract to attempt to achieve the MBE goals as stated in the solicitation document.

2) The contractor agrees to use his/her best efforts to carry out these requirements consistent with the efficient and effective performance of the contract.

3) The contractor must ensure that all certified MBEs shall have the maximum practical opportunity to compete for additional subcontract work under the contract, even after the award of the contract.

4) The contractor shall submit monthly to the MBE Liaison or the school system’s designated representative a report listing any unpaid invoices, over 30 days old, received from any certified MBE subcontractor, the amount of each invoice and the reason payment has not been made.

5) The contractor shall included in its agreements with its certified MBE subcontractors, a requirement that those subcontractors submit monthly to the MBE Liaison or appropriate representative a report that identifies the prime contract and lists all payments received from the contractor in the preceding 30 days, as well as any outstanding invoices, and the amount of those invoices.

6) The contractor shall cooperate in any reviews of the contractor’s procedures and practices with respect to minority business enterprises, which the MBE Liaison, the Public School Construction Program, and/or the Governor’s Office of Minority Affairs may, from time to time, conduct.

7) The contractor shall maintain such records as are necessary to confirm compliance with its MBE participation obligations. These records must indicate the identity of certified minority and non-minority subcontractors employed on the contract, the type of work performed by each, and the actual dollar value of work performed.
Subcontract agreements documenting the work performed by all MBE participants must be retained by the contractor and furnished to the MBE Liaison and/or appropriate representative on request.

8) All records concerning MBE participation must be retained by the contractor for a period of five years after final completion of the contract, and will be available for inspection by the MBE Liaison, representatives from the Public School Construction Program and/or other designated official entities.

9) At the option of the MBE Liaison or appropriate agency representative, upon completion of the contract and before final payment and/or release of retainage, the contractor shall submit a final report in affidavit form and under penalty of perjury, of all payments made to, or withheld from MBE subcontractors.

10) If at any time after submission of a bid or proposal and before execution of a contract, the apparent successful bidder or offeror determines that a certified MBE listed on Attachment B - MBE Participation Schedule has become or will become unavailable, then the apparent successful bidder or offeror shall immediately notify the procurement officer and provide such officer with a reason(s) why the change has occurred. Any desired change in Attachment B - MBE Participation Schedule shall be approved in advance by the procurement officer and shall indicate the contractor’s efforts to substitute another certified MBE subcontractor to perform the work. Desired changes occurring after the date of contract execution may occur only upon written approval by the LEA.

11) A business that presents itself as a minority business may participate in a project but the contract value may not be counted toward the MBE goal or subgoals, if applicable, until the business is certified by MDOT. If it is not certified at the time of contract award it may not be counted toward the goal or subgoals, if applicable, at that time. Only the funds paid after MDOT certification can be counted toward meeting the MBE goal or subgoals, if applicable. If a certified MBE fails to meet the standards specified in State Finance and Procurement Article 14-301, Annotated Code of Maryland, the payments made to the MBE can be recorded and counted under a contract entered into when the MBE was eligible and certified. Ineligibility of an MBE to participate in the MBE program may not be the sole cause of the termination of the MBE contractual relationship for the remainder of the term of the contract.

12) Contractors are encouraged to seek additional MBE participation in their contracts during the life of the project. Any additional MBE participation from certified MBEs should be reported to the MBE liaison and should be included in subsequent monthly requisitions for payment.

13) The contractor shall complete the Standard Monthly Contractor’s Requisition for Payment (IAC/PSCP Form 306.4), specifically page 3 of 16, Minority Business Enterprise Participation, with each requisition submitted for payment. This submittal should accurately reflect the payments to be made that month to MBEs, and the cumulative total for the period specified. Any and all MBE firms that are identified on Attachment B – MBE Participation Schedule should be included on page 3 of the first and all subsequent requisitions for payment. Any MBEs identified during the life of the project should be added as soon as the contractor engages them.

14) At the completion of the project the contractor shall prepare a written summary of the final certified MBE participation in the contract as compared to the proposed participation at the time of contract award. This should include the name of each certified MBE, the amount that was anticipated to be paid at the time of contract award, the amount actually paid, and an explanation of any differences that have occurred. Special attention should be given to any situations where the final payments to any MBE was below the level of commitment at the time of contract award.

6. Projects Utilizing a Construction Manager Delivery Method
This section of the procedure has been prepared based upon the utilization of Construction Manager Agency method of delivery. If another alternative method of project delivery is being considered, then these procedures would need to be adapted in consultation with the PSCP before proceeding.

a. For projects that are being designed and solicited utilizing a Construction Manager Agency delivery method with multiple prime contracts, the school system can structure its procedures to attain the overall MBE goal and subgoals, if applicable, for the project as presented below:

b. The MBE liaison and other school system staff should work with the project’s construction manager, cost estimator, and architect, along with any other individuals who could provide assistance, to determine the overall MBE utilization strategy for the work required, appropriate bid packages, and an appropriate overall MBE goal and subgoals, if applicable, for each specific bid or proposal package.

c. The overall MBE goal and subgoals, if applicable, for the project shall represent the aggregate of the individual goals and subgoals, if applicable, set for each bid or proposal package.

d. In setting the specific goals and subgoals, if applicable, for each solicitation package consideration should be given to the potential for MBE participation to the maximum extent possible. The information and procedures provided in section 4.0 MBE Goal Setting Procedures should be consulted and followed for these types of projects.

e. Prior to submitting the construction documents for State review and authorization to solicit bids or proposals, the school system’s representative will prepare a complete list of the individual solicitation packages and indicate the MBE goal and subgoals, if applicable, for each solicitation package. This would include the overall MBE goal and subgoals, if applicable, established in the solicitation documents, the estimated cost for each solicitation package, and the estimated MBE dollar amounts for each solicitation package. A copy of this list should be submitted with the construction documents. The list should be retained as a record by the school system for comparison to the actual contracts awarded with MBE participation, and the final actual MBE participation at the completion of the project.

f. Contractors submitting bids or proposals for solicitation packages that do not include a MBE goal and subgoals, if applicable, would not be required to submit any of the MBE attachments that are otherwise required nor would they be required to indicate that they are requesting a waiver. The school system representative would, however, request information from the contractor at the completion of the project to determine if any certified MBE firms had participated in the contract.

g. All other submittals of MBE materials and reporting requirements are applicable for the project, including the submittal of attachments a and b as described above in section 6.0. This includes the documentation for a request for a waiver, if applicable and appropriate.

7. Projects Utilizing an Indefinite Delivery/Indefinite Quantity (IDIQ) or Job Order Contracting (JOC) Method of Delivery

a. The solicitation should be prepared and the overall MBE goal and subgoals, if applicable, established based upon the type of work that is anticipated to be specified or performed under the contract and the availability of certified MBEs. This could include an analysis of the percentages of the different types of work, the estimated dollar value in the entire contract, and the availability of MBEs.

b. If an overall goal and subgoals, if applicable, are set the bidders or offerors would be required to submit Attachment A - Certified Minority Business Enterprise Utilization and Fair Solicitation Affidavit in which they could indicate their anticipated MBE participation based upon the entire contract amount and the types of work specified. The award of contract can be made based upon their estimate of MBE participation since there is no specific task order or description of work to be performed and subcontractors have not been identified or engaged through any type of commitment or subcontract.
c. Since MBE participation is only anticipated in a general sense as an objective and specific contracts to MBEs have not been signed, then the contract award would not be included in any reporting to the PSCP or subsequent reporting to GOMA.

d. However, as the contract proceeds and individual task orders and/or purchase orders are issued, the contractor should submit Attachment B - MBE Participation Schedule for any and all projects or work where MBE subcontractors and/or suppliers might reasonably be utilized. Discussions between the contractor or offeror and the LEA as the task orders and/or purchase orders are being developed should address this aspect of the contract requirements.

e. Any MBE participation should be recorded by the MBE liaison and reported to the PSCP MBE Liaison as the task orders and/or purchase orders are approved.

f. The contractor shall complete the Standard Monthly Contractor’s Requisition for Payment (IAC/PSCP FORM 306.4), specifically page 3 of 16, Minority Business Enterprise Participation, with each requisition submitted for payment. This submittal should accurately reflect the payments to be made that month to MBE S, and the cumulative total for the period specified. Any and all MBE firms that are identified on Attachment B - MBE Participation Schedule should be included on page 3 of the first and all subsequent requisitions for payment. Any MBEs identified during the life of the project should be added as soon as the contractor engages them.

g. At the completion of the contract period or the full utilization of the contract’s value a report should be prepared by the LEA MBE Liaison and submitted to the PSCP MBE Liaison summarizing the MBE participation in each and all of the task orders or purchase orders issued under the contract. This should include the anticipated MBE participation prior to the issuance of the solicitation, the MBE participation anticipated at the time of contract award and the actual MBE participation at the completion of the contract.

8. Projects Utilizing the Design/Build Delivery Method

a. The solicitation is for both A/E services and the actual construction of a public school project. The solicitation should be prepared and the MBE goal and subgoals, if applicable, established for the construction work that is anticipated for the project. The goal setting procedures described in Section 4.0 above should be utilized for these types of projects.

b. The bidders or offerors should be required to submit Attachment A - Certified Minority Business Enterprise Utilization and Fair Solicitation Affidavit on which they would indicate their anticipated MBE participation based upon the construction work anticipated and their understanding of the MBE goal and subgoals, if applicable, the types of work involved, and the availability of certified MBEs for the project. Since there are no detailed plans or designs for the project and there are no contracts or subcontracts for the actual construction work there is no need to submit any other MBE attachments, at this time.

c. If the bidder or offeror, who is to be awarded this contract has indicated that they do not anticipate achieving the overall MBE participation goal and subgoals, if applicable, for this project on Attachment A, then they are in effect requesting a waiver. They will be required to submit documentation at a later date to justify this request.

d. As the project proceeds through the design phase and the project is nearing the completion of the construction documents for submission to the State to review, the Design/Build Team (team) in consultation with LEA representatives should discuss the opportunities and potential for certified MBEs to participate in the project.

e. The team should begin to identify potential contractors and subcontractors, opportunities to segment the project, and MBEs that could participate in the project.

f. At a point in time that is approximately 30 days prior to the anticipated CD submission to the State, the team should complete and submit Attachment B - MBE Participation Schedule to the LEA for their review and approval.
g. If the team had indicated on Attachment A that they would meet the goals and the information on Attachment B indicates that they did meet the goals then the team should proceed with the construction of the project.

h. If the team had indicated on Attachment A that they did not anticipate meeting the overall MBE goal and subgoals, if applicable, or only a portion of the goal and subgoals, if applicable, then Attachment B should be reviewed by the LEA. The team should, at this time, submit their documentation in support of the waiver requested.

i. The proposed MBE participation should be reviewed and a determination made as to whether the team has made a good faith effort to meet the MBE goals and subgoals, if applicable, established for the project and as stated on Attachment A, previously submitted.

j. If a request for a waiver is made and approved, Attachment F – MBE Waiver Documentation should be signed by a school system representative and submitted to the PSCP and the Governor’s Office of Minority Affairs.

k. Since there was no MBE participation reported at the time of the award of the Design/Build contract, the LEA would submit the entire package of information, including all of the MBE related attachments to the PSCP within ten (10) days of the team being directed to proceed with the actual construction work.

l. All other submittals of MBE materials and reporting requirements are applicable for the project, as described above in Section 6.0.

7.0 RECORDS AND REPORTS

1. The MBE Liaison shall maintain such records as are necessary to confirm compliance with its Minority Business Enterprise Procedures and activities. The records shall be maintained until the project is audited by the Public School Construction Program. These records shall include by project:
   a. The contractor report submitted at the completion of the project;
   b. The identity of the minority contractors employed on the project;
   c. The type of work performed;
   d. The actual dollar value of the work, services, supplies or equipment; and
   e. The MBE percentage of the total contract.

2. The MBE Liaison will maintain a record of all waivers approved for each project or solicitation package where the prime contractor was unable to achieve the established overall goal or subgoals, if applicable. The MBE Liaison will, however, report to the PSCP all MBE participation by MDOT certified firms who are prime contractors, subcontractors, suppliers, or otherwise making an economically viable contribution to each project. This information shall be reported to PSCP within ten (10) days after approval of the award of the contract by the board of education.

3. The LEA shall submit the “Certified Minority Business Enterprise Participation Standard Monthly Contractor’s Requisition for Payment” (IAC/PSCP Form 306.4 page 3 of 16, located in the Administrative Procedures Guide), which is Attachment G in this procedure, to the PSCP Director of Fiscal Services as part of the regular monthly request for payment for the project.

4. The LEA shall submit the “Close-Out Cost Summary” (IAC/PSCP Form 306.6 located in the Administrative Procedures Guide), which is Attachment H of this procedure, along with the “Certified Minority Business Enterprise Participation Standard Monthly Contractor’s Requisition for Payment” (IAC/PSCP Form 306.4) to the PSCP Director of Fiscal Services within 180 days of completion of the project.
5. Each fiscal year end, PSCP Fiscal Services will create a report “Payments Made To Contractors during The Fiscal Year” and maintain such records as are necessary to confirm compliance with its minority business enterprise procedures and activities.

6. Each fiscal year end, PSCP Fiscal Services will create a report “Projects Completed During the Fiscal Year” and maintain such records as are necessary to confirm compliance with its Minority Business Enterprise Procedures and activities. This report will compare the overall MBE goal and subgoals, if applicable, for each specific project with the MBE participation anticipated at the time of contract award and the actual MBE participation at the completion of the project.

8.0 MONITORING

1. The LEA’s procurement personnel or project staff shall verify that the certified MBE’s listed in the MBE participation schedule are actually performing the work.

2. The LEA’s procurement personnel shall ensure that MBE subcontractors are receiving compensation as set forth in the MBE participation schedule by ensuring that the contractor submits monthly reports, listing any unpaid invoices over 30 days old received from any certified MBE subcontractor, the amount of each invoice, and the reason payment has not been made.

3. The MBE Liaison and/or the Public School Construction Program will conduct reviews as deemed necessary to confirm compliance with the minority business enterprise participation requirements.

4. The MBE Liaison will maintain appropriate records, and shall assist the Public School Construction Program in on-site or post-audit reviews upon request.

5. Auditors from the Public School Construction Program will have access to and the ability to audit MBE participation for specific projects, information retained by the LEA, and/or submitted to the IAC in reports/forms filed by the LEA as referenced above.

9.0 MINORITY BUSINESS ENTERPRISE LIAISON

1. The Superintendent shall designate an individual to be identified as the MBE Liaison for the school system.

2. The MBE Liaison will be the contact person who will work with the Public School Construction Program and the Governor’s Office of Minority Affairs to implement the Minority Business Enterprise Program for the school system and the State of Maryland.

3. The Superintendent will immediately notify the Public School Construction Program if there is a change in the MBE Liaison for the school system.
CERTIFIED MINORITY BUSINESS ENTERPRISE UTILIZATION AND FAIR SOLICITATION AFFIDAVIT

NOTE: You must include this document with your bid or offer. If you do not submit the form with your bid or offer, the procurement officer shall deem your bid non-responsive or your offer not reasonably susceptible of being selected for award.

* * * * * * * * * * * * * * * * *

Part I.
I acknowledge the:

- Overall certified MBE subcontract participation goal of ____19__%. and
- The subgoals, if applicable, of:
  - ____7__% for certified African American-owned businesses and
  - ____4__% for certified Asian American-owned businesses and
  - ____% for certified women-owned businesses.

I have made a good-faith effort to achieve this goal. If awarded the contract, I will continue to attempt to increase MBE participation during the project.

Part II.
Check ONE Box

NOTE: FAILURE TO CHECK ONE OF BOXES 1, 2, or 3 BELOW WILL RENDER A BID NON-RESPONSIVE OR AN OFFER NOT REASONABLY SUSCEPTIBLE OF BEING SELECTED FOR AWARD

NOTE: INCONSISTENCY BETWEEN THE ASSERTIONS ON THIS FORM AND THE INFORMATION PROVIDED ON THE MBE PARTICIPATION SCHEDULE (ATTACHMENT B) MAY RENDER A BID NON-RESPONSIVE OR AN OFFER NOT REASONABLY SUSCEPTIBLE OF BEING SELECTED FOR AWARD

1  □ I have met the overall MBE goal and MBE subgoals for this project. I submit with this Affidavit [Attachment A] the MBE Participation Schedule [Attachment B], which details how I will reach that goal.

or

2  □ After having made a good-faith effort to achieve the overall MBE goal and MBE subgoals for this project, I can achieve partial success only. I submit with this Affidavit [Attachment A] the MBE Participation Schedule [Attachment B], which details the MBE participation I have achieved.

I request a partial waiver as follows:

- Waiver of overall MBE subcontract participation goal: ____%
- Waiver of MBE subcontract participation subgoals, if applicable:
  - ____% for certified African American-owned businesses and
  - ____% for certified Asian American-owned businesses and
  - ____% for certified women-owned businesses.

Within 10 days of being informed that I am the apparent awardee, I will submit MBE Waiver Documentation [Attachment F] (with supporting documentation).
3  ☐ After having made a good faith effort to achieve the overall MBE goal and MBE subgoals for this project, I am unable to achieve any portion of the goal or subgoals. I submit with this Affidavit [Attachment A] the MBE Participation Schedule [Attachment B].

I request a full waiver.

Within 10 days of being informed that I am the apparent awardee, I will submit MBE Waiver Documentation [Attachment F] (with supporting documentation).

Part III.

I understand that if I am the apparent awardee or conditional awardee, I must submit within **10 working days** after receiving notice of the potential award or within 10 days after the date of conditional award – whichever is earlier – the:

- Outreach Efforts Compliance Statement (Attachment C)
- Subcontractor Project Participation Statement (Attachment D)
- Minority Subcontractors Unavailability Certificate (Attachment E) (if applicable)
- Any other documentation the Procurement Officer requires to ascertain my responsibility in connection with the MBE participation goal and subgoals

I acknowledge that if I fail to timely return complete documents, the Procurement Officer may determine that I am not responsible and therefore not eligible for contract award. If the contract has been awarded, the award is voidable.

I acknowledge that the MBE subcontractors/suppliers listed in the MBE Participation Schedule and any additional MBE subcontractor/suppliers identified in the Subcontractor Project Participation Statement will be used to accomplish the percentage of MBE participation that I intend to achieve.

In the solicitation of subcontract quotations or offers, MBE subcontractors were provided the same information and amount of time to respond as were non-MBE subcontractors.

The solicitation process was conducted in such a manner so as to not place MBE subcontractors at a competitive disadvantage to non-MBE subcontractors.

I **solemnly affirm under the penalties of perjury that this Affidavit is true to the best of my knowledge, information, and belief.**

____________________________   ______________________________
Bidder/Offeror Name     Affiant Signature
____________________________   ______________________________
Address      Printed Name & Title
____________________________   ______________________________
Address (continued)     Date

September 2008
Attachment B
MBE PARTICIPATION SCHEDULE
This document must be included with the bid or offer. If the bidder or offeror fails to submit this form with the bid or offer as required, the procurement officer shall deem the bid non-responsive or shall determine that the offer is not reasonably susceptible of being selected for award.

<table>
<thead>
<tr>
<th>1. Prime Contractor’s Name</th>
<th>2. Prime Contractor’s Address and Telephone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Project/School Name</td>
<td>4. Project/School Location</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>5. LEA and PSC No.</td>
<td>6. Base Bid Amount $</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>7a. Minority Firm Name</td>
<td>Minority Firm Address</td>
</tr>
<tr>
<td>Minority Firm Telephone Number</td>
<td></td>
</tr>
<tr>
<td>Minority Firm Fax Number</td>
<td></td>
</tr>
<tr>
<td>MDOT Certification Number</td>
<td></td>
</tr>
<tr>
<td>Work to be Performed and Subcontract Dollar Amount</td>
<td>Percent of Total Contract</td>
</tr>
<tr>
<td>7b. Minority Firm Name</td>
<td>Minority Firm Address</td>
</tr>
<tr>
<td>Minority Firm Telephone Number</td>
<td></td>
</tr>
<tr>
<td>Minority Firm Fax Number</td>
<td></td>
</tr>
<tr>
<td>MDOT Certification Number</td>
<td></td>
</tr>
<tr>
<td>Subcontract Dollar Amount</td>
<td>Percent of Total Contract</td>
</tr>
<tr>
<td>7c. Minority Firm Name</td>
<td>Minority Firm Address</td>
</tr>
<tr>
<td>Minority Firm Telephone Number</td>
<td></td>
</tr>
<tr>
<td>Minority Firm Fax Number</td>
<td></td>
</tr>
<tr>
<td>MDOT Certification Number</td>
<td></td>
</tr>
<tr>
<td>Subcontract Dollar Amount</td>
<td>Percent of Total Contract</td>
</tr>
<tr>
<td>8. MBE Total Dollar Amount</td>
<td>9. Total MBE Percent of Entire Contract</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Form Prepared by :</td>
<td>11. Reviewed and Accepted by Board of Education MBE Liaison</td>
</tr>
<tr>
<td>Name</td>
<td>Name</td>
</tr>
<tr>
<td>Title</td>
<td>Title</td>
</tr>
<tr>
<td>Date</td>
<td>Date</td>
</tr>
</tbody>
</table>

Total MBE Participation: _____% $ ________
Total African-American MBE Participation: _____% $ ________
Total Asian-American MBE Participation: _____% $ ________
Total Woman-Owned MBE Participation: _____% $ ________
Total Other Participation: _____% $ ________

June 2008
Attachment C

OUTREACH EFFORTS COMPLIANCE STATEMENT

In conjunction with the bid or offer submitted in response to _______________ County Public Schools for the _________________ project, PSC # _______________, I state the following:

(name)

1) Bidder/Offeror identified opportunities to subcontract in these specific work categories:

2) Attached to this form are copies of written solicitations (with bidding instructions) used to solicit certified MBEs for these subcontract opportunities.

3) Bidder/Offeror made the following attempts to contact personally the solicited MBEs:

4)  □  Bidder/Offeror assisted MBEs to fulfill or to seek waiver of bonding Requirements (Described Efforts)

        □  This project does not involve bonding requirements.

5)  □  Bidder/Offeror did/did not attend the pre-bid conference

        □  No pre-bid conference was held.

_________________________________  By: ________________________
Bidder/Offeror Name

_________________________________   _________________________
Address       Name,Title

_________________________________   __________________________
Date
MINORITY BUSINESS ENTERPRISES SUBCONTRACTOR PROJECT PARTICIPATION STATEMENT

PROJECT/ SCHOOL NAME: ______________________________________________________

PROJECT/ SCHOOL LOCATION: _________________________________________________

LEA: _________________________________________________________________________

NAME OF PRIME CONTRACTOR: _______________________________________________

NAME OF MBE SUBCONTRACTOR: ______________________________________________

MDOT Certification Number

1. Work/Services to be performed by MBE Subcontractor: __________________________

2. Subcontract Amount: $ _______________________________________________________

3. Bonds - Amount and type required of Subcontractor if any: _________________________

4. MBE Anticipated or Actual Commencement Date: _______________ Completion Date: ________

5. This MBE subcontract represents the following percentage of the total contract cost: _____

6. This is an African American Firm: Yes _______ No _______

7. This is a Women Owned Business Firm: Yes _______ No _______

8. This is an Asian, American Indian, Hispanic or Disabled Firm: Yes _______ No _______

(Circle One)

*************************************************************************************

The undersigned subcontractor and prime contractor will enter into a contract for the work/service indicated above upon the prime contractor’s execution of a contract for the above referenced project with the Board of Education. The undersigned subcontractor is a MDOT certified Minority Business Enterprise. The terms and conditions stated above are consistent with our agreements.

Signature of Subcontractor: ______________________________________________________

Date: _____________________________

*************************************************************************************

The term and conditions stated above are consistent with our agreements.

Signature of Prime Contractor: ___________________________________________________

Date: _____________________________
MINORITY SUBCONTRACTOR UNAVAILABILITY CERTIFICATE

1. It is hereby certified that the firm of ____________________________ (Name of Minority firm) located at ____________________________

(Number) ____________________________ (Street) ____________________________

(City) ____________________________ (State) ____________________________ (Zip)

was offered an opportunity to bid on the ____________________________ school project in ________________ County by ____________________________ (Name of Prime Contractor’s Firm)

************************************************************************************

2. The ____________________________ (Minority Firm), is either unavailable for the work/service or unable to prepare a bid for this project for the following reason(s):

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

Signature of Minority Firm’s MBE Representative ____________________________ Title ____________________________ Date ____________________________

MDOT Certification # ____________________________ Telephone # ____________________________

3. To be completed by the prime contractor if Section 2 of this form is not completed by the minority firm.

To the best of my knowledge and belief, said Certified Minority Business Enterprise is either unavailable for the work/service for this project, is unable to prepare a bid, or did not respond to a request for a price proposal and has not completed the above portion of this submittal.

Signature of Prime Contractor ____________________________ Title ____________________________ Date ____________________________
Attachment F

MBE WAIVER DOCUMENTATION

Project Name: ___________________________________________  PSC No. ______________________

Base Contract Amount  $ ____________________________

Plus Accepted Alternates ____________________________________________

Equals Total Contract Amount  $ ____________________________

I have previously requested that a waiver be granted to the overall MBE goal for this project of _____ percent,
with a minimum of ____ percent from certified African American-owned businesses, a minimum of ____ percent from certified women-owned businesses, and the balance from all certified minority business enterprises, if applicable. This would include the total dollar value of all materials, supplies, equipment, and services, including construction services directly or indirectly, from Minority Business Enterprises (MBE) which are currently certified by the Maryland Department of Transportation (MDOT).

I ____________________________, hereby certify that my position is ________________________________, and I am the duly authorized representative of ________________________________.

I further certify that I have submitted a Schedule for Participation of Certified Minority Business Enterprises which reflects the percentage and dollar value of certified Minority Business Enterprise participation which my company expects to achieve for this contract. Therefore, the request for the waiver is as follows:

<table>
<thead>
<tr>
<th>Minority Group</th>
<th>MBE GOAL</th>
<th>Actual MBE Dollar Participation</th>
<th>Request For Waiver</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Percent of Total Contract</td>
<td>Dollar Value of Total Contract*</td>
<td>Dollar Value</td>
</tr>
<tr>
<td>a. Sub Goal African American</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Sub Goal Women</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Sub Goal Asian American</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Other * in Sub Goal group a/b above</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTALS</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* with accepted/rejected alternates
To support this request for a waiver, I include the following information as attachments which I certify to be true to the best of my knowledge.

1. A detailed statement of the efforts made by the contractor to identify and select portions of the work proposed to be performed by subcontractors in order to increase the likelihood of achieving the stated goal;
2. A detailed statement of the efforts made by the contractor prior to and up to 10 days before the bid opening to solicit minority business enterprises through written notices that describe the categories of work for which subcontracting is being solicited, the type of work to be performed, and specific instructions on how to submit a bid;
3. A detailed statement of the contractor’s efforts to make personal contact with MBE firms identified for Item 2. above;
4. A record of the name, address, telephone number, and dates contacted for each MBE identified under items 2. and 3. above;
5. A description of the information provided to MBE’s regarding the plans, specifications and the anticipated time schedule for portions of the work to be performed;
6. Information on activities to assist minority business enterprises to fulfill bonding requirements, or to obtain a waiver of these requirements;
7. Information on activities to publicize contracting opportunities to minority business enterprises, attendance at pre-bid meetings, or other meetings scheduled by the MBE Liaison or designated representative;
8. As to each MBE that placed a subcontract quotation or offer which the apparent low bidder or successful offeror considers not to be acceptable, a detailed statement of reasons for this conclusion; and
9. A list of minority subcontractors found to be unavailable. This shall be accompanied by a Minority Subcontractor Unavailability Certificate signed by the minority business enterprise or from the apparent low bidder or successful offeror indicating that the minority business did not provide the written certification.

Signature __________________________________________ Date: __________________________

(Company Representative Name)

Sworn and subscribed before me this __________________________ day.

of __________________________ in the year __________________________ Notary Public

********************************************************************************

Reviewed and accepted by the __________________________ County Board of Education MBE
Liaison.

(County Name)

Signature __________________________________________ Date: __________________________

(County Representative Name)

MBE Request For Waiver Master Form (July 2002)
**CERTIFIED MINORITY BUSINESS ENTERPRISE PARTICIPATION**  
**STANDARD MONTHLY CONTRACTOR’S REQUISITION FOR PAYMENT**

<table>
<thead>
<tr>
<th>Name of MBE Sub-Contractor</th>
<th>MDOT Certification Number and Classification</th>
<th>TOTAL MBE Contract Amount</th>
<th>Amount to be Paid THIS Requisition</th>
<th>TOTAL Paid to Date</th>
<th>MBE has Received FINAL Payment?</th>
<th>If amount paid is LESS than TOTAL MBE Contract Amount, EXPLAIN VARIANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL:** $ - $ - $ -

MDOT Certification Number and Classification can be located at [http://mbc.state.mdot.state.md.us/directory/](http://mbc.state.mdot.state.md.us/directory/)

**MBE Classification:**
- African American = AA
- Hispanic American = H
- Native American = N
- Asian American = A
- Women = W
- African American/Women = AAW
- Hispanic American/Women = HW
- Native American/Women = NW
- Asian American/Women = AW

I certify that the figures and information presented above represent accurate and true statements, that timely payments have been and will be made to suppliers and subcontractors on this project as requisitioned payments are received, and in accordance with our contracts.

__________________________  ______________________________
Name of Contractor Firm     Authorized Contractor Signature/Date

__________________________  ______________________________
Contractor Federal Tax ID #  Contractor MBE Classification # (if applicable)

__________________________  ______________________________
Name of LEA MBE Liaison (Printed)  Signature of LEA MBE Liaison/Date

Revised March 2013
Instructions for Completion of IAC/PSCP Form 306.4 Page 3

THIS FORM TO BE COMPLETED BY PRIME CONTRACTOR ONLY

1. **LEA** – Enter full name of LEA.
2. **Facility Name** – Enter full name of school/facility.
3. **Scope of Work** – Enter type of work being performed (i.e. New, Renovation, Roof, HVAC, ASP – Flooring, QZAB – Media Center, etc.).
4. **Date** – Date of Requisition.
5. **PSC NO** – Enter full PSC Number as assigned by PSCP.
6. **REQ NO** – Enter the number of the corresponding Requisition for Payment.
7. **Name of MBE Sub-Contractor** – Enter full name of MBE Sub-Contractor.
8. **MDOT Certification Number & Classification** – Enter the 5 digit MDOT Certification number and corresponding MDOT Classification for each MBE Sub-Contractor. MDOT Classifications and the MDOT website are listed at the bottom of this form.
9. **TOTAL MBE Contract Amount** – Enter ORIGINAL Total MBE Contract Amount as stated on MBE Attachments B and D. This amount should NOT be altered with change order amounts, changes to scope of work, etc. which may affect contract amount.
10. **Amount to be Paid This Requisition** – Enter the amount to be paid to the MBE Sub-Contractor for work applicable to this requisition.
11. **TOTAL Paid to Date** – Enter the TOTAL amount paid to date to the MBE Sub-Contractor – this amount should NOT include the amount being paid on this requisition, only the total of prior payments.
12. **MBE has Received FINAL Payment** – Enter “YES” if the MBE Sub-Contractor has been paid in full. Enter “NO” if the MBE Sub-Contractor has NOT been paid in full.
13. **If amount paid is LESS than TOTAL MBE Contract Amount, EXPLAIN VARIANCE** – Enter a brief reason for the MBE Sub-Contractor NOT being paid equal to or greater than the ORIGINAL Total MBE Contract Amount as stated on this form and MBE Attachments B & D. Additional documentation may be required to be submitted for variance explanations.
14. **Name of Contractor Firm** – Enter full name of Prime Contractor.
15. **Authorized Contractor Signature/Date** – The authorized individual employed by the Prime Contractor who filled this form out should date and sign here.
16. **Contractor Federal Tax ID #** – Enter the Federal Tax ID Number of the Prime Contractor.
17. **Contractor MBE Classification #** - Enter the MDOT MBE Classification Number if the Prime Contractor is a MDOT certified MBE Company.
18. **Name of LEA MBE Liaison** – PRINT the name of the LEA MBE Liaison (or other LEA authorized employee) responsible for VERIFYING ALL INFORMATION filled out by the Prime Contractor on this form.
19. **Signature of LEA MBE Liaison/Date** – Signature of the person VERIFYING ALL INFORMATION filled out by the Prime Contractor on this form (signature of person stated in Step #18.)
Procedures for Request for Payment/Reimbursement for ALL PSCP Funded Programs

1. Use IAC/PSCP Form 306.4 Page 3.

2. The Prime Contractor must complete this Form and submit it with each Monthly Requisition/Invoice for Payment for each project in which they are seeking payment from either the Local Education Agency (LEA) or State of Maryland Public School Construction Program. If no MBE Sub-Contractors were utilized on a project (i.e., no MBE goals were set for the project and/or a full waiver was granted), this Form must still be submitted by the Prime Contractor.
   a. IAC/PSCP Form 306.4 Page 3 must be PROJECT specific – If one bid/contract covers multiple projects (either different schools or scopes of work), this Form must be calculated and submitted by the Prime Contractor on an individual project basis.
   b. IAC/PSCP Form 306.4 Page 3 must be Prime Contractor/Trade Package specific – If the IAC recognized multiple Prime Contractors and/or Trade Packages, this Form must be completed by each Prime/Trade Contractor recognized by the IAC and submitted.

3. All ORIGINAL MBE Sub-Contractors must be listed on this Form with their full company name, MDOT Certification Number, MDOT Classification and ORIGINAL Contract Amount as stated on MBE Attachments B & D. (ONLY MDOT Certified companies should be listed on this Form.)

4. Any additional MBE Sub-Contractors utilized on a project must be listed on this Form with their full company name, MDOT Certification Number, MDOT Classification and total contract amount. (ONLY MDOT Certified companies should be listed on this Form.)

5. The Prime Contractor should fill in the amount they intend to pay each MBE Sub-Contractor for the current requisition as well as all money paid to date. By signing this Form, the Prime Contractor is certifying their intent to pay the “Amount to be Paid This Requisition”. They are also certifying the distribution of money listed under the “Total Paid to Date” column.

6. The LEA MBE Liaison shall verify each month with the MBE Sub-Contractors that all money listed under the “Total Paid to Date” column has been received from the Prime Contractor. By signing this Form, the LEA MBE Liaison is certifying all MBE Sub-Contractors have been paid all money due to them by the Prime Contractor.

7. The MBE Liaison should also be comparing the current Form with the prior month(s) to make sure information is not being duplicated and/or repeated. Payments to MBE Sub-Contractors should be progressive and recorded.

8. If for any reason, an amount the Prime Contractor listed on the Form as intending to pay the MBE Sub-Contractor was not made, or if the payment amount changed, the LEA MBE Liaison should be inquiring about the change in payment or non-payment to the MBE Sub-Contractor.

9. NO REQUESTS FOR PAYMENT/REIMBURSEMENT SHOULD BE SUBMITTED TO PSCP UNTIL THE PROCEDURES ABOVE HAVE BEEN COMPLETED.

As of March 2013
Public School Construction Program

MBE Document Submission Requirements

Procedures for Close-Out Summary Submission

1. Use IAC/PSCP Form 306.4 Page 3.

2. The Prime Contractor must complete this Form and submit it with the FINAL Requisition to the LEA or upon LEA request. If no MBE Sub-Contractors were utilized on a project (i.e. no MBE goals were set for the project and/or a full waiver was granted), this Form must still be submitted by the Prime Contractor.
   a. IAC/PSCP Form 306.4 Page 3 must be PROJECT specific – If one bid/contract covers multiple projects (either different schools or scopes of work), this Form must be calculated and submitted by the Prime Contractor on an individual project basis.
   b. IAC/PSCP Form 306.4 Page 3 must be Prime Contractor/Trade Package specific – If the IAC recognized multiple Prime Contractors and/or Trade Packages, this Form must be completed by each Prime/Trade Contractor recognized by the IAC and submitted.

3. All ORIGINAL MBE Sub-Contractors must be listed on this Form with their full company name, MDOT Certification Number, MDOT Classification and ORIGINAL Contract Amount as stated on MBE Attachments B & D. (ONLY MDOT Certified companies should be listed on this Form.)

4. Any additional MBE Sub-Contractors utilized on a project must be listed on this Form with their full company name, MDOT Certification Number, MDOT Classification and total contract amount. (ONLY MDOT Certified companies should be listed on this Form.)

5. The Final Form 306.4 should reflect ALL money paid to each MBE Sub-Contractor. There is a column on the Form to answer “Yes” or “No” for the MBE Sub-Contractor being paid in full. There is also a column on the Form for the Prime Contractor to state a brief reason if a MBE Sub-Contractor was paid less than the original contract amount stated on MBE Attachments B & D. By signing this Form, the Prime Contractor is certifying the MBE Sub-Contractors have been paid in full for this project.

6. The LEA MBE Liaison shall verify with the MBE Sub-Contractors that all money listed under the “Total Paid to Date” column has been received and no additional money is owed to them by the Prime Contractor. By signing this Form, the LEA MBE Liaison is certifying all MBE Sub-Contractors have been paid in full by the Prime Contractor for this project.

7. NO CLOSE-OUT SUMMARY SHOULD BE SUBMITTED TO PSCP UNTIL THE ABOVE PROCEDURES HAVE BEEN COMPLETED.

Additional Submission Requirements Applicable to All State Funded Projects

1. If an ORIGINAL MBE Sub-Contractor listed on MBE Attachments B and D is not paid in full and/or not utilized on a project, the Prime Contractor shall submit in writing an explanation for either the reduction in contract amount/payment or why the MBE Sub-Contractor was not utilized.

2. It is the responsibility of the LEA MBE Liaison to contact the MBE Sub-Contractor to verify the explanation provided by the Prime Contractor. Any correspondence between the LEA MBE Liaison and both the Prime Contractor and MBE Sub-Contractors should be kept by the LEA and be made available to PSCP upon request or audit.

3. If an MBE Sub-Contractor originally listed on MBE Attachment B & D becomes unavailable and/or is not going to be utilized, this information should be communicated to the PSCP MBE Program Manager and the PSCP Finance Department by the LEA immediately.

4. If additional MBE Sub-Contractors are hired after the MBE Attachments B & D have been submitted to PSCP, the LEA MBE Liaison must submit this information to the PSCP MBE Program Manager and the PSCP Finance Department immediately.

As of March 2013
# CLOSE-OUT COST SUMMARY

<table>
<thead>
<tr>
<th>LEA:</th>
<th>DATE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCHOOL NAME:</td>
<td>PSC #:</td>
</tr>
</tbody>
</table>

### Public School Construction

<table>
<thead>
<tr>
<th>Allocation:</th>
<th>Cash Disbursements:</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0</td>
<td>$0</td>
</tr>
</tbody>
</table>

### Approved Contracts

<table>
<thead>
<tr>
<th>Expenditures</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0</td>
<td>$0</td>
</tr>
</tbody>
</table>

### Local and Other

<table>
<thead>
<tr>
<th>A/E</th>
<th>$0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Related Costs</td>
<td>$0</td>
</tr>
</tbody>
</table>

### Total

<table>
<thead>
<tr>
<th>Expenditures</th>
<th>$0</th>
</tr>
</thead>
</table>

I hereby certify that the data shown hereon is correct and request this project be closed.

______________________________
Signature of LEA Representative

---

**FOR STATE USE ONLY**

**ADJUSTMENTS:**

<table>
<thead>
<tr>
<th>Allocation:</th>
<th>Initials</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cash:</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**AUDIT COMMENTS:**

<table>
<thead>
<tr>
<th>Initials</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SECTION 00 43 43

WAGE RATES REQUIREMENTS
REQUEST FOR ADVERTISEMENT AND NOTICE TO PROCEED

Scott Bachtell - Procurement Officer
Washington County Public Schools
10435 Downsville Pike
Hagerstown, MD 21740

Re: Funkstown Elementary Roofing Replacement
Project No: PSC# 21.051.17SR

Enclosed please find the Prevailing Wage Determination and Instructions for Contractors for the project referenced above.

Upon advertisement for bid or proposal of this project, you are requested to submit to this office the date and name of publication in which such advertisement appeared.

Once awarded, you are further directed to submit to this office, the NOTICE TO PROCEED for the project, complete with the date of notice, the name of the general contractor, and the dollar amount of the project. In addition, we ask that a representative of the prevailing wage Unit be invited to attend the Pre-Construction Conference.

Any questions concerning this matter may be referred to PrevailingWage@dllr.state.md.us

Sincerely,

Enclosures
Wage Determination
Instruction for the Contractor

Prevailing Wage Unit
The contractor shall electronically submit completed copies of certified payroll records to the Commissioner of Labor & Industry, Prevailing Wage Unit by going on-line to https://www.dllr.state.md.us/prevwage and following the instructions for submitting payroll information (NOTE: A contractor must register prior to submitting on-line certified payroll information).

If you have technical questions regarding electronic submittal, contact the Department at prevailingwage@dllr.state.md.us.

All certified payroll records shall have an accurate week beginning and ending date. The contractor shall be responsible for certifying and submitting to the Commissioner of Labor and Industry, Prevailing Wage Unit all of their subcontractors' payroll records covering work performed directly at the work site. By certifying the payroll records, the contractor is attesting to the fact that the wage rates contained in the payroll records are not less than those established by the Commissioner as set forth in the contract, the classification set forth for each worker or apprentice conforms with the work performed, and the contractor or subcontractor has complied with the provisions of the law.

A contractor or subcontractor may make deductions that are (1) required by law; (2) required by a collective bargaining agreement between a bona fide labor organization and the contractor or subcontractor; or (3) contained in a written agreement between an employer and an employee undertaken at the beginning of employment, if the agreement is submitted by the employer to the public body awarding the public work and is approved by the public body as fair and reasonable.

A contractor or subcontractor is required to submit information on-line on their fringe benefit packages including a list of fringe benefits for each craft employed by the contractor or subcontractor, by benefit and hourly amount. Where fringe benefits are paid in cash to the employee or to an approved plan, fund, or program, the contribution is required to be indicated.

Payroll records must be electronically submitted and received within 14 calendar days after the end of each payroll period. If the contractor is delinquent in submitting payroll records, processing of partial payment estimates may be held in abeyance pending receipt of the records. In addition, if the contractor is delinquent in submitting the payroll records, the contractor shall be liable to the contracting public body for liquidated damages. The liquidated damages are $10.00 for each calendar day the records are late.

Only apprentices registered with the Maryland Apprenticeship and Training Council shall be employed on prevailing wage projects. Apprentices shall be paid a percentage of the determined journey person’s wage for the specific craft.

Overtime rates shall be paid by the contractor and any subcontractors under its contracts and agreements with their employees which in no event shall be less than time and one-half the prevailing hourly rate of wages for all hours worked in excess of ten (10) hours in any one calendar day; in excess of forty (40) hours per workweek; and work performed on Sundays and legal holidays.

Contractors and subcontractors employing a classification of worker for which a wage rate was not issued SHALL notify the Commissioner of Labor & Industry, Prevailing Wage Unit, for the purpose of obtaining the wage rate for said classification PRIOR TO BEING EMPLOYED on the project. To obtain a prevailing wage rate which was NOT listed on the Wage Determination, a contractor or subcontractor can look on the DLLR webpage under prevailing wage.

Contractors and subcontractors shall maintain a valid copy of proper State and county licenses that permit the contractor and a subcontractor to perform construction work in the State of Maryland. These licenses must be retained at the worksite and available for review upon request by the Commissioner of Labor and Industry’s designee.

**Each contractor under a public work contract subject to Section 17-219 shall:**

1. Post a clearly legible statement of each prevailing wage rate to be paid under the public work contract; and
2. Keep the statement posted during the full time that any employee is employed on the public work contract.
3. The statement of prevailing wage rates shall be posted in a prominent and easily accessible place at the site of the public work.
**Penalty - Subject to Section 10-1001 of the State Government Article, the Commissioner may impose on a person that violates this section a civil penalty of up to $50.00 per violation.**

Under the Maryland Apprenticeship and Training Council requirements, consistent with proper supervision, training and continuity of employment and applicable provisions in collective bargaining agreements, a ratio of one journey person regularly employed to one apprentice shall be allowed. No deviation from this ratio shall be permitted without prior written approval from the Maryland Apprenticeship and Training Council.

Laborers may NOT assist mechanics in the performance of the mechanic's work, NOR USE TOOLS peculiar to established trades.

ALL contractors and subcontractors shall employ only competent workers and apprentices and may NOT employ any individual classified as a HELPER or TRAINEE on a prevailing wage project.

The State Apprenticeship and Training Fund (Fund) law provides that contractors and certain subcontractors performing work on certain public work contracts are required to make contributions toward apprenticeship. See §17-601 through 17-606, State Finance and Procurement, Annotated Code of Maryland. Contractors and subcontractors have three options where they can choose to make their contributions: (1) participate in a registered apprenticeship training program; (2) contribute to an organization that has a registered apprenticeship training program; or (3) contribute to the State Apprenticeship and Training Fund.

The Department of Labor, Licensing and Regulation (DLLR) is moving forward with final adoption of regulations. The regulations were published in the December 14, 2012 edition of the Maryland Register.

**IMPORTANT:** Please note that the obligations under this law will become effective on JULY 1, 2013. This law will require that contractors and certain subcontractors make contributions toward apprenticeship and report those contributions on their certified payroll records that they submit pursuant to the prevailing wage law.

The Department is offering outreach seminars to any interested parties including contractors, trade associations, and any other stakeholders. Please contact the Department at prevailingwage@dllr.state.md.us or (410) 767-2968 for seminar times and locations. In addition, information regarding this law will be provided at pre-construction meetings for projects covered by the Prevailing Wage law.

For additional information, contact:
Division of Labor and Industry
Maryland Apprenticeship and Training
1100 North Eutaw Street, Room 606
Baltimore, Maryland 21201
(410) 767-2246
E-Mail Address: matp@dllr.state.md.us.
The wage rates to be paid laborers and mechanics for the locality described below is announced by order of Commissioner of Labor and Industry.

It is mandatory upon the successful bidder and any subcontractor under him, to pay not less than the specific rates to all workers employed by them in executing contracts in this locality. Reference: Annotated Code of Maryland State Finance and Procurement, Section 17-201 thru 17-226.

These wage rates were taken from the locality survey of 2015 for Washington County, issued pursuant to the Commissioner's authority under State Finance and Procurement Article Section 17-209, Annotated Code of Maryland or subsequent modification.

**Note: If additional Prevailing Wage Rates are needed for this project beyond those listed below, contact the Prevailing Wage Unit. Phone: (410) 767-2342, email: prevailingwage@dllr.state.md.us.

Name and Title of Requesting Officer: Scott Bachtell - Procurement Officer
Department, Agency or Bureau: Washington County Public Schools
Project Number: PSC# 21.051.17SR
Location and Description of work: Washington County: Replace existing built-up roof with new, single ply roof system
Determination Number: 31163
Date of Issue: Sep 30, 2016

BUILDING CONSTRUCTION

<table>
<thead>
<tr>
<th>CLASSIFICATION</th>
<th>MODIFICATION REASON</th>
<th>BASIC HOURLY RATE</th>
<th>BORROWED FROM</th>
<th>FRINGE BENEFIT PAYMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>BALANCING TECHNICIAN</td>
<td>AD</td>
<td>$15.00</td>
<td>023</td>
<td>$6.03</td>
</tr>
<tr>
<td>BOILERMAKER</td>
<td>AD</td>
<td>$25.58</td>
<td></td>
<td>$17.85</td>
</tr>
<tr>
<td>BRICKLAYER</td>
<td>AD</td>
<td>$28.17</td>
<td></td>
<td>$9.32</td>
</tr>
<tr>
<td>CARPENTER</td>
<td>AD</td>
<td>$33.71</td>
<td></td>
<td>$4.07</td>
</tr>
<tr>
<td>CEMENT MASON</td>
<td>AD</td>
<td>$25.53</td>
<td>023</td>
<td>$14.53</td>
</tr>
<tr>
<td>COMMUNICATION INSTALLER TECHNICIAN</td>
<td>AB</td>
<td>$22.29</td>
<td>001</td>
<td>$7.35</td>
</tr>
<tr>
<td>DRYWALL - SPACKLING, TAPING, &amp; FINISHING</td>
<td>AD</td>
<td>$26.95</td>
<td>001</td>
<td>$15.75</td>
</tr>
<tr>
<td>ELECTRICIAN</td>
<td>AB</td>
<td>$30.50</td>
<td></td>
<td>$15.68</td>
</tr>
<tr>
<td>ELEVATOR MECHANIC</td>
<td>AD</td>
<td>$37.00</td>
<td>001</td>
<td>$9.58</td>
</tr>
<tr>
<td>FIREPROOFER - SPRAYER</td>
<td>AD</td>
<td>$35.75</td>
<td></td>
<td>$21.41</td>
</tr>
<tr>
<td>FIRESTOPPER</td>
<td>AD</td>
<td>$26.06</td>
<td></td>
<td>$5.85</td>
</tr>
<tr>
<td>Occupation</td>
<td>AD</td>
<td>W/Std</td>
<td>Std</td>
<td>Rate</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>----</td>
<td>-------</td>
<td>-----</td>
<td>-------</td>
</tr>
<tr>
<td>GLAZIER</td>
<td>AD</td>
<td>$40.76</td>
<td>001</td>
<td>$7.98</td>
</tr>
<tr>
<td>INSULATION WORKER</td>
<td>AD</td>
<td>$33.13</td>
<td></td>
<td>$14.04</td>
</tr>
<tr>
<td>IRONWORKER - FENCE ERECTOR</td>
<td>AD</td>
<td>$26.73</td>
<td>001</td>
<td>$12.08</td>
</tr>
<tr>
<td>IRONWORKER - REINFORCING</td>
<td>AD</td>
<td>$28.50</td>
<td></td>
<td>$6.11</td>
</tr>
<tr>
<td>IRONWORKER - STRUCTURAL</td>
<td>AD</td>
<td>$28.70</td>
<td></td>
<td>$17.15</td>
</tr>
<tr>
<td>MILLWRIGHT</td>
<td>AD</td>
<td>$27.05</td>
<td></td>
<td>$15.50</td>
</tr>
<tr>
<td>PAINTER</td>
<td>AD</td>
<td>$24.89</td>
<td>001</td>
<td>$8.97</td>
</tr>
<tr>
<td>PLUMBER</td>
<td>AD</td>
<td>$33.23</td>
<td></td>
<td>$12.28</td>
</tr>
<tr>
<td>POWER EQUIPMENT OPERATOR - ASPHALT DISTRIBUTOR</td>
<td>AD</td>
<td>$17.02</td>
<td></td>
<td>$3.17</td>
</tr>
<tr>
<td>POWER EQUIPMENT OPERATOR - BACKHOE</td>
<td>AD</td>
<td>$25.75</td>
<td></td>
<td>$13.65</td>
</tr>
<tr>
<td>POWER EQUIPMENT OPERATOR - BOOM TRUCK</td>
<td>AD</td>
<td>$29.52</td>
<td>001</td>
<td>$13.65</td>
</tr>
<tr>
<td>POWER EQUIPMENT OPERATOR - BROOM / SWEEPER</td>
<td>AD</td>
<td>$13.00</td>
<td></td>
<td>$0.33</td>
</tr>
<tr>
<td>POWER EQUIPMENT OPERATOR - CONCRETE PUMP</td>
<td>AD</td>
<td>$29.52</td>
<td>001</td>
<td>$13.65</td>
</tr>
<tr>
<td>POWER EQUIPMENT OPERATOR - CRANE</td>
<td>AD</td>
<td>$30.12</td>
<td></td>
<td>$13.65 a + b</td>
</tr>
<tr>
<td>POWER EQUIPMENT OPERATOR - CRANE - TOWER</td>
<td>AD</td>
<td>$30.12</td>
<td>001</td>
<td>$13.65 a + b</td>
</tr>
<tr>
<td>POWER EQUIPMENT OPERATOR - EXCAVATOR</td>
<td>AD</td>
<td>$29.52</td>
<td>001</td>
<td>$13.65</td>
</tr>
<tr>
<td>POWER EQUIPMENT OPERATOR - FORKLIFT</td>
<td>AD</td>
<td>$39.26</td>
<td></td>
<td>$13.40 a + b</td>
</tr>
<tr>
<td>POWER EQUIPMENT OPERATOR - GRADALL</td>
<td>AD</td>
<td>$15.70</td>
<td>023</td>
<td>$3.11</td>
</tr>
<tr>
<td>POWER EQUIPMENT OPERATOR - GRADER</td>
<td>AD</td>
<td>$24.82</td>
<td></td>
<td>$13.10 a + b</td>
</tr>
<tr>
<td>POWER EQUIPMENT OPERATOR - LOADER</td>
<td>AD</td>
<td>$29.52</td>
<td>001</td>
<td>$13.65</td>
</tr>
<tr>
<td>POWER EQUIPMENT OPERATOR - MECHANIC</td>
<td>AD</td>
<td>$29.52</td>
<td>001</td>
<td>$13.65</td>
</tr>
<tr>
<td>POWER EQUIPMENT OPERATOR - MILLING MACHINE</td>
<td>AD</td>
<td>$13.50</td>
<td></td>
<td>$0.00</td>
</tr>
<tr>
<td>POWER EQUIPMENT OPERATOR - OILER</td>
<td>AD</td>
<td>$19.57</td>
<td>001</td>
<td>$6.15</td>
</tr>
<tr>
<td>POWER EQUIPMENT OPERATOR - PAVER</td>
<td>AD</td>
<td>$16.00</td>
<td></td>
<td>$0.00</td>
</tr>
<tr>
<td>POWER EQUIPMENT OPERATOR - ROCK / STUMP TUB GRINDER</td>
<td>AD</td>
<td>$28.97</td>
<td>023</td>
<td>$13.65</td>
</tr>
<tr>
<td>POWER EQUIPMENT OPERATOR - ROLLER - ASPHALT</td>
<td>AD</td>
<td>$16.00</td>
<td></td>
<td>$0.66</td>
</tr>
<tr>
<td>POWER EQUIPMENT OPERATOR - ROLLER - EARTH</td>
<td>AD</td>
<td>$29.52</td>
<td>001</td>
<td>$13.65</td>
</tr>
<tr>
<td>POWER EQUIPMENT OPERATOR - SCREAMED</td>
<td>AD</td>
<td>$16.00</td>
<td></td>
<td>$0.00</td>
</tr>
<tr>
<td>POWER EQUIPMENT OPERATOR - SKID STEER (BOBCAT)</td>
<td>AD</td>
<td>$16.00</td>
<td></td>
<td>$0.00</td>
</tr>
<tr>
<td>POWER EQUIPMENT OPERATOR - SKIDDER</td>
<td>AD</td>
<td>$28.97</td>
<td>023</td>
<td>$13.65</td>
</tr>
<tr>
<td>RESILIENT FLOOR</td>
<td>AD</td>
<td>$29.38</td>
<td></td>
<td>$9.65</td>
</tr>
<tr>
<td>ROOFER/WATERPROOFER</td>
<td>AD</td>
<td>$28.00</td>
<td></td>
<td>$9.65</td>
</tr>
<tr>
<td>SHEETMETAL WORKER</td>
<td>AD</td>
<td>$27.36</td>
<td></td>
<td>$19.15</td>
</tr>
<tr>
<td>SPRINKLERFITTER</td>
<td>AD</td>
<td>$48.40</td>
<td></td>
<td>$0.00</td>
</tr>
<tr>
<td>STEAMFITTER/PIPEFITTER</td>
<td>AD</td>
<td>$33.23</td>
<td></td>
<td>$12.28</td>
</tr>
<tr>
<td>TILE &amp; TERRAZZO FINISHER</td>
<td>AD</td>
<td>$21.96</td>
<td></td>
<td>$9.61</td>
</tr>
<tr>
<td>TILE &amp; TERRAZZO MECHANIC</td>
<td>AD</td>
<td>$27.50</td>
<td></td>
<td>$10.78</td>
</tr>
<tr>
<td>TRUCK DRIVER - DUMP</td>
<td>AD</td>
<td>$17.00</td>
<td></td>
<td>$4.06</td>
</tr>
<tr>
<td>TRUCK DRIVER - DUMP - ARTICULATING</td>
<td>AD</td>
<td>$28.97</td>
<td>023</td>
<td>$13.65</td>
</tr>
<tr>
<td>TRUCK DRIVER - FLATBED</td>
<td>AD</td>
<td>$17.00</td>
<td>001</td>
<td>$6.03</td>
</tr>
<tr>
<td>TRUCK DRIVER - TACK/TAR TRUCK</td>
<td>AD</td>
<td>$22.02</td>
<td>001</td>
<td>$17.76</td>
</tr>
<tr>
<td>TRUCK DRIVER - TRACTOR TRAILER</td>
<td>AD</td>
<td>$22.50</td>
<td>023</td>
<td>$6.03</td>
</tr>
<tr>
<td>TRUCK DRIVER - WATER</td>
<td>AD</td>
<td>$28.97</td>
<td>023</td>
<td>$13.65</td>
</tr>
</tbody>
</table>

**LABORER GROUP II**

| LABORER - ASPHALT RAKER            | AD | $23.16 |     | $1.32 |
### FRINGE REFERENCES AS NOTED:


b. **PAID VACATIONS:** Employees with 1 year service - 1 week paid vacation; 2 years service - 2 weeks paid vacation; 10 years service - 3 weeks paid vacation.

---

#### Incidental Craft Data: Caulker, Man Lift Operator, Rigger, Scaffold Builder, and Welder receive the wage and fringe rates prescribed for the craft performing the operation to which welding, scaffold building, rigging, operating a Man Lift, or caulking is incidental.

---

#### These Informational Prevailing Wage Rates may not be substituted for the requirements of pre-advertisement or onsite job posting for a public work contract that exceeds $500,000 in value and either of the following criteria are met: (1) the contracting body is a unit of State government or an instrumentality of the State and there is any State funding for the project; or (2) the contracting body is a political subdivision, agency, person or entity (such as a county) and the State funds 50% or more of the project.

---

**Modification Codes:**

(AD) 17-209 Annual Determination from Survey Wage Data Received  
(CH) 17-211 Commissioners’ Hearing  
(CR) 17-208 Commissioners’ Review  
(SR) 17-208 Survey Review by Staff

---

<table>
<thead>
<tr>
<th>Laborer - Common</th>
<th>AD</th>
<th>$23.16</th>
<th>$1.32</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laborer - Concrete Puddler</td>
<td>AD</td>
<td>$23.16</td>
<td>$1.32</td>
</tr>
<tr>
<td>Laborer - Concrete Tender</td>
<td>AD</td>
<td>$23.16</td>
<td>$1.32</td>
</tr>
<tr>
<td>Laborer - Concrete Vibrator</td>
<td>AD</td>
<td>$23.16</td>
<td>$1.32</td>
</tr>
<tr>
<td>Laborer - Density Gauge</td>
<td>AD</td>
<td>$23.16</td>
<td>$1.32</td>
</tr>
<tr>
<td>Laborer - Fireproofer - Mixer</td>
<td>AD</td>
<td>$23.16</td>
<td>$1.32</td>
</tr>
<tr>
<td>Laborer - Flagger</td>
<td>AD</td>
<td>$23.16</td>
<td>$1.32</td>
</tr>
<tr>
<td>Laborer - Grade Checker</td>
<td>AD</td>
<td>$23.16</td>
<td>$1.32</td>
</tr>
<tr>
<td>Laborer - Hand Roller</td>
<td>AD</td>
<td>$23.16</td>
<td>$1.32</td>
</tr>
<tr>
<td>Laborer - Jackhammer</td>
<td>AD</td>
<td>$23.16</td>
<td>$1.32</td>
</tr>
<tr>
<td>Laborer - Landscaping</td>
<td>AD</td>
<td>$23.16</td>
<td>$1.32</td>
</tr>
<tr>
<td>Laborer - Layout</td>
<td>AD</td>
<td>$23.16</td>
<td>$1.32</td>
</tr>
<tr>
<td>Laborer - Luteman</td>
<td>AD</td>
<td>$23.16</td>
<td>$1.32</td>
</tr>
<tr>
<td>Laborer - Mortar Mixer</td>
<td>AD</td>
<td>$23.16</td>
<td>$1.32</td>
</tr>
<tr>
<td>Laborer - Plasterer - Handler</td>
<td>AD</td>
<td>$23.16</td>
<td>$1.32</td>
</tr>
<tr>
<td>Laborer - Tamper</td>
<td>AD</td>
<td>$23.16</td>
<td>$1.32</td>
</tr>
</tbody>
</table>

**Laborers Group I**

| Laborer - Air Tool Operator | AD  | $19.84  | 001 | $17.30 |
| Laborer - Asphalt Paver | AD  | $19.84  | 001 | $17.30 |
| Laborer - Blaster - Dynamite | AD  | $19.84  | 001 | $17.30 |
| Laborer - Burner | AD  | $19.84  | 001 | $17.30 |
| Laborer - Concrete Surfacer | AD  | $19.84  | 001 | $17.30 |
| Laborer - Hazardous Material Handler | AD  | $19.84  | 001 | $17.30 |
| Laborer - Mason Tender | AD  | $19.84  | 001 | $17.30 |
| Laborer - Pilelayer | AD  | $19.84  | 001 | $17.30 |
| Laborer - Scaffold Builder | AD  | $19.84  | 001 | $17.30 |
Each "Borrowed From" county is identified with the FIPS 3-digit county code unique for the specific jurisdiction in Maryland.

For additional information on the FIPS (Federal Information Processing Standard) code, see [http://www.census.gov/datamap/fipslist/AllSt.txt](http://www.census.gov/datamap/fipslist/AllSt.txt)

The Prevailing Wage rates appearing on this form were originally derived from Maryland's annual Wage Survey. The Commissioner of Labor & Industry encourages all contractors and interested groups to participate in the voluntary Wage Survey, detailing wage rates paid to workers on various types of construction throughout Maryland.

A mail list of both street and email addresses is maintained by the Prevailing Wage Unit to enable up-to-date prevailing wage information, including Wage Survey notices to be sent to contractors and other interested parties. If you would like to be included in the mailing list, please forward (1) your Name, (2) the name of your company (if applicable), (3) your complete postal mailing address, (4) your email address and (5) your telephone number to PWMAILINGLIST@dhr.state.md.us. Requests for inclusion can also be mailed to: Prevailing Wage, 1100 N. Eutaw Street - Room 607, Baltimore MD 21201-2201.
SECTION 00 52 13

AIA DOCUMENT A101-2007

CONTRACT AGREEMENT
 AGREEMENT made as of the «» day of «February» in the year «Two Thousand Seventeen»
(In words, indicate day, month and year)

BETWEEN the Owner:

« Board of Education of Washington County »
« 10435 Downsville Pike
Hagerstown, MD 21740 »

and the Contractor:

« »
« »
« »

for the following Project:

Bid No. 2017-11
Roof Replacement at
Funkstown Elementary School
23 Funkstown Road
Hagerstown, Maryland 21740

The Architect is:

Bushey Feight Morin Architects
473 North Potomac Street
Hagerstown, Maryland 21740

The Owner and Contractor agree as follows.
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
10. INSURANCE AND BONDS

ARTICLE 1 THE CONTRACT DOCUMENTS

The Contract Documents consist of this Agreement, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, 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, 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 the date of this Agreement unless a different date is stated below or provision is made for the date to be fixed in a notice to proceed issued by the Owner.

(Insert the date of commencement if it differs from the date of this Agreement or, if applicable, state that the date will be fixed in a notice to proceed.)

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

§ 3.3 The Contractor shall achieve Substantial Completion of the entire Work not later than:

«The Contractor shall achieve Substantial Completion of the entire Work not later than August 11, 2017 »

<table>
<thead>
<tr>
<th>Portion of Work</th>
<th>Substantial Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Substantial Completion</td>
<td>August 11, 2017</td>
</tr>
<tr>
<td>Final Completion</td>
<td>September 1, 2017</td>
</tr>
</tbody>
</table>

subject to adjustments of this Contract Time as provided in the Contract Documents.

«Liquidation damages in the amount of One Thousand Dollars ($1,000) per calendar day to apply and shall be assessed against the contractor for delay to Substantial Completion and Final Completion. »
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 Dollars and Zero Cents ($0.00), subject to additions and deductions as provided in the Contract Documents.

§ 4.2 The Contract Sum is based upon the following alternates, if any, which are described in the Contract Documents and are hereby accepted by the Owner:

<table>
<thead>
<tr>
<th>Item</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td></td>
</tr>
</tbody>
</table>

§ 4.3 Unit prices, if any:
(Identify and state the unit price; state quantity limitations, if any, to which the unit price will be applicable.)

<table>
<thead>
<tr>
<th>Item</th>
<th>Price Per Unit ($0.00)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repair Deck</td>
<td>Per square feet</td>
</tr>
<tr>
<td>Replace Deck</td>
<td>Per square feet</td>
</tr>
<tr>
<td>Blocking</td>
<td>Per lineal feet</td>
</tr>
</tbody>
</table>

§ 4.4 Allowances included in the Contract Sum, if any:
(Identify allowance and state exclusions, if any, from the allowance price.)

<table>
<thead>
<tr>
<th>Item</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td></td>
</tr>
</tbody>
</table>

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, 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 «1st» day of a month, the Owner shall make payment of the certified amount to the Contractor not later than the «15th» day of the «following» month. If an Application for Payment is received by the Architect after the application date fixed above, payment shall be made by the Owner not later than «Forty-five» («45») days after the Architect receives and approves the Application for Payment.

§ 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, unless objected to by the Architect, 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 Subject to other provisions of the Contract Documents, the amount of each progress payment shall be computed as follows:
1. Take that portion of the Contract Sum properly allocable to completed Work as determined by multiplying the percentage completion of each portion of the Work by the share of the Contract Sum allocated to that portion of the Work in the schedule of values, less retainage of Five percent («5.00%»). Amounts for changes in the work shall not be included on an Application for Payment until the Change Order is executed.
Add 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), less retainage of Five percent (5.00%). Reference the Washington County Public School’s Supplement Conditions to the AIA Document A201-1997, page 14 of 23, paragraph 9.3.2 for the policy concerning payments for stored materials.

Subtract the aggregate of previous payments made by the Owner; and

Subtract amounts, if any, for which the Architect has withheld or nullified a Certificate for Payment as provided in Section 9.5 of AIA Document A201–1997.

The progress payment amount determined in accordance with Section 5.1.6 shall be further modified under the following circumstances:

Upon Substantial Completion of the Work, a sum sufficient to increase the total payments to the full amount of the Contract Sum, less such amounts as the Architect shall determine for incomplete Work, retainage applicable to such work and unsettled claims; and (Section 9.8.5 of AIA Document A201–1997 requires release of applicable retainage upon Substantial Completion of Work with consent of surety, if any.

If final completion of the Work is thereafter materially delayed through no fault of the Contractor, any additional amounts payable shall be in accordance with Section 9.10.3 of AIA Document A201–1997.

Reduction or limitation of retainage, if any, shall be at the sole discretion of the owner.

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.

Final payment, constituting the entire unpaid balance of the Contract Sum, shall be made by the Owner to the Contractor per the Washington County Public School’s Supplement Conditions to the AIA Document A201-1997, paragraph 9.10.

The Contractor has fully performed the Contract except for the Contractor’s responsibility to correct Work as provided in Section 12.2.2 of AIA Document A201-1997, and to satisfy other requirements, if any, which extend beyond final payment; and

A final Certificate for Payment has been issued by the Architect.

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:

The Contract may be terminated by the Owner or the Contractor as provided in Article 14 of AIA Document A201–1997.

The Work may be suspended by the Owner as provided in Article 14 of AIA Document A201–1997.

Where reference is made in this Agreement to a provision of AIA Document A201–1997 or another Contract Document, the reference refers to that provision as amended or supplemented by other provisions of the Contract Documents.

Deleted

The Owner’s representative:
§ 8.4 The Contractor’s representative:
(Name, address and other information)

§ 8.5 Neither the Owner’s nor the Contractor’s representative shall be changed without ten days written notice to the other party.

§ 8.6 Other provisions: The following provisions may be fully described in the General Conditions of the Contract for Construction and the associated Supplemental Conditions by Washington County Public Schools.

§ 8.7 LiquidatedDamages
This contract requires the contractor to make good faith efforts to comply with the Minority Business Enterprise ("MBE") Program and contract provisions. WCPS and the Contractor acknowledge and agree that WCPS will incur damages, including but not limited to loss of goodwill, detrimental impact on economic development, and diversion of internal staff resources, if the Contractor does not make good faith efforts to comply with the requirements of the MBE Program and MBE contract provisions. The parties further acknowledge and agree that the damages WCPS might reasonably be anticipated to accrue as a result of such lack of compliance are difficult to ascertain with precision.

Therefore, upon a determination by WCPS that the Contractor failed to make good faith efforts to comply with one or more of the specified MBE Program requirements or contract provisions, the Contractor agrees to pay liquidated damages to WCPS at the rates set forth below. The Contractor expressly agrees that WCPS may withhold payment on any invoices as a set-off against liquidated damages owed. The Contractor further agrees that for each specified violation, the agreed upon liquidated damages are reasonably proximate to the loss WCPS is anticipated to incur as a result of such violation.

a. Failure to submit each monthly payment report in full compliance with COMAR 21.11.03.13B (3): $52.00 per day until the monthly report is submitted as required.

b. Failure to include in its agreements with MBE subcontractors a provision requiring submission of payment reports in full compliance with COMAR 21.11.03.13B (4): $52.00 per MBE subcontractor.

c. Failure to comply with COMAR 21.11.03.12 in terminating, canceling, or changing the scope of work/value of a contract with an MBE subcontractor and/or amendment of the MBE participation schedule: the difference between the dollar value of the MBE participation commitment on the MBE participation schedule for that specific MBE firm and the dollar value of the work performed by that MBE firm for the contract.

d. Failure to meet the Contractor’s total MBE participation goal and subgoal commitments: the difference between the dollar value of the total MBE participation commitment on the MBE participation schedule and the MBE participation actually achieved.

Notwithstanding the use of liquidated damages, WCPS reserves the right to terminate the contract and exercise all other rights and remedies provided in the contract or by law.

ARTICLE 9 ENUMERATION OF CONTRACT DOCUMENTS
§ 9.1 The Contract Documents, except for Modifications issued after execution of this Agreement, are enumerated in the sections below.

§ 9.1.1 The Agreement is this executed AIA Document A101–2007, Standard Form of Agreement Between Owner and Contractor.
§ 9.1.2 The General Conditions are AIA Document A201–1997, General Conditions of the Contract for Construction as presented in the Project Manual, as modified by the Board of Education of Washington County.

§ 9.1.3 The Supplementary and other Conditions of the Contract are those contained in the Project Manual; dated January 18, 2017.

§ 9.1.4 The Specifications are those contained in the Project Manual dated January 18, 2017 as in Section 9.1.3 and are listed in Exhibit A.

§ 9.1.5 The Drawings are dated January 18, 2017 and listed in Exhibit B unless modified by the Addenda listed in Section 9.1.6 below:

§ 9.1.6 The Addenda, if any:

<table>
<thead>
<tr>
<th>Number</th>
<th>Date</th>
</tr>
</thead>
</table>

ARTICLE 10 INSURANCE AND BONDS

§ 10.1 The Contractor shall provide a Performance Bond and a Labor and Material Payment Bond in the sum of one hundred percent (100%) of the Contract price as set forth in AIA Document A201-1997 General Conditions of the Contract for Construction, as amended by the Board of Education of Washington County.

§ 10.2 The Contractor shall provide insurance with limits as described within Article 11 of the General Conditions of the Contract for Construction AIA Contract A201-1997, as amended by the Board of Education of Washington County.

§ 10.3 Certificate of Insurance: Prior to proceeding with the work, the contractor agrees to provide a Certificate of Insurance with the application coverage as listed in the Specifications:

List the Certificate Holder and Additional Insured as:
Board of Education of Washington County
10435 Downsville Pike
Hagerstown, MD 21740

List the Project as:
Roof Replacement
Funkstown Elementary School
23 Funkstown Road
Hagerstown, Maryland 21740

This Agreement entered into as of the day and year first written above and is executed in at least three original copies, of which one is to be delivered to the Contractor, one to the Architect for use in the administration of the Contract, and the remainder to the Owner.

OWNER (Signature)
«Clayton M. Wilcox, Ed.D »
«Superintendent of Schools»
(Printed name and title)

CONTRACTOR (Signature)
«»
«»
(Printed name and title)
SECTION 00 52 14

WCPS CONTRACT AFFIDAVIT
WASHTINGHTON COUNTY PUBLIC SCHOOLS
10435 Downsville Pike, Hagerstown, Maryland 21740

CONTRACT AFFIDAVIT

MANDATORY CONTRACT ADDENDUM

COMAR 21.07.01.25

Bidder shall complete and submit this contract affidavit to the Legal Department of Washington County Public Schools to attach with the contract form.

A. AUTHORITY

I HEREBY AFFIRM THAT:

I, (print name)______________________________possess the legal authority to make this Affidavit.

B. CERTIFICATION OF REGISTRATION OR QUALIFICATION WITH THE STATE DEPARTMENT OF ASSESSMENTS AND TAXATION

I FURTHER AFFIRM THAT:

The business named above is a (check applicable items):

Corporation: ____domestic ____or foreign

Limited Liability Company: ____domestic ____or foreign

Partnership: ____domestic ____or foreign

Statutory Trust: ____domestic _____or foreign

Sole Proprietorship: ____and is registered or qualified as required under Maryland Law.

I further affirm that the above business is in good standing both in Maryland and (IF APPLICABLE) in the jurisdiction where it is presently organized, and has filed all of its annual reports, together with filing fees, with the Maryland State Department of Assessments and Taxation. The name and address of its resident agent (IF APPLICABLE) filed with State Department of Assessments and Taxation is:

Name and Department ID Number__________________________________________________________

Address:______________________________________________________________________________

and that if it does business under a trade name, it has filed a certificate with the State Department of Assessments and Taxation that correctly identifies that true name and address of the principal or owner as:
Name and Department ID Number: 

Address: 

C. FINANCIAL DISCLOSURE AFFIRMATION

I FURTHER AFFIRM THAT:

I am aware of, and the above business will comply with, the provisions of the State Finance and Procurement Article §13-221, Annotated Code of Maryland, which require that every business that enters into contracts, leases, or other agreements with the State of Maryland or its agencies during a calendar year under which the business is to receive in the aggregate $100,000 or more shall, within 30 days of the time when the aggregate value of the contracts, leases, or other agreements reaches $100,000, file with the Secretary of State of Maryland certain specified information to include disclosure of beneficial ownership of the business.

D. POLITICAL CONTRIBUTION DISCLOSURE AFFIRMATION

I FURTHER AFFIRM THAT:

I am aware of, and the above business will comply with, Election Law Article §§14-101-14-108, Annotated Code of Maryland, which requires that every person that enters into contracts, leases, or other agreements with the State of Maryland, including its agencies or a political subdivision of the State, during a calendar year in which the person receives in the aggregate $100,000 or more shall file with the State Board of Elections a statement disclosing contributions in excess of $500 made during the reporting period to a candidate for elective office in any primary or general election.

E. DRUG AND ALCOHOL FREE WORKPLACE

(Applicable to all contracts unless the contract is for a law enforcement agency and the agency head or the agency head’s designee has determined that application of COMAR 21.11.08 and this certification would be inappropriate in connection with the law enforcement agency’s undercover operations.)

I CERTIFY THAT:

(1) Terms defined in COMAR 21.11.08 shall have the same meanings when used in this certification. 
(2) By submission of its bid or offer, the business, if other than an individual, certifies and agrees that, with respect to its employees to be employed under a contract resulting from this solicitation, the business shall:

(a) Maintain a workplace free of drug and alcohol abuse during the term of the contract;

(b) Publish a statement notifying its employees that the unlawful manufacture, distribution, dispensing, possession, or use of drugs, and the abuse of drugs or alcohol is prohibited in the
business’ workplace and specifying the actions that will be taken against employees for violation of the prohibitions;

(c) Prohibit its employees from working under the influence of drugs or alcohol;

(d) Not hire or assign to work on the contract anyone who the business knows, or in the exercise of due diligence should know, currently abuses drugs or alcohol and is not actively engaged in a bona fide drug or alcohol abuse assistance or rehabilitation program;

(e) Promptly inform the appropriate law enforcement agency of every drug-related crime that occurs in its workplace if the business has observed the violation or otherwise has reliable information that a violation has occurred;

(f) Establish drug and alcohol abuse awareness programs to inform its employees about:
   (i) The dangers of drug abuse and alcohol abuse in the workplace;
   (ii) The business’s policy of maintaining a drug and alcohol free workplace;
   (iii) Any available drug and alcohol counseling, rehabilitation, and employee assistance programs; and
   (iv) The penalties that may be imposed upon employees who abuse drugs and alcohol in the workplace;

(g) Provide all employees engaged in the performance of the contract with a copy of the statement required by §E(2)(b), above;

(h) Notify its employees in the statement required by §E(2)(b), above, that as a condition of continued employment on the contract, the employee shall:
   (i) Abide by the terms of the statement; and
   (ii) Notify the employer of any criminal drug or alcohol abuse conviction for an offense occurring in the workplace not later than 5 days after a conviction;

(i) Notify the procurement officer within 10 days after receiving notice under §E(2)(h)(ii), above, or otherwise receiving actual notice of a conviction;

(j) Within 30 days after receiving notice under §E(2)(h)(ii), above, or otherwise receiving actual notice of a conviction, impose either of the following sanctions or remedial measures on any employee who is convicted of a drug or alcohol abuse offense occurring in the workplace:
   (i) Take appropriate personnel action against an employee, up to and including termination; or
   (ii) Require an employee to satisfactorily participate in a bona fide drug or alcohol abuse assistance or rehabilitation program; and

(k) Make a good faith effort to maintain a drug and alcohol free workplace through implementation of §E(2)(a)-(j), above.
(3) If the business is an individual, the individual shall certify and agree as set forth in §E(4), below, that the individual shall not engage in the unlawful manufacture, distribution, dispensing, possession, or use of drugs or the abuse of drugs or alcohol in the performance on the contract.

(4) I acknowledge and agree that:

(a) The award of the contract is conditional upon compliance with COMAR 21.11.08 and this certification;
(b) The violation of the provisions of COMAR 21.11.08 or this certification shall be cause to suspend payments under, or terminate the contract for default under COMAR 21.07.01.11 or 21.07.03.15, as applicable; and
(c) The violation of the provisions of COMAR 21.11.08 or this certification in connection with the contract may, in the exercise of the discretion of the Board of Public Works, result in suspension and debarment of the business under COMAR 21.08.03.

F. CERTAIN AFFIRMATIONS VALID

I FURTHER AFFIRM THAT:

To the best of my knowledge, information, and belief, each of the affirmations, certifications, or acknowledgments contained in that certain Bid/Proposal Affidavit dated ______________________, 20____, and executed by me for the purpose of obtaining the contract to which this Exhibit is attached remains true and correct in all respects as if made as of the date of this Contract Affidavit and as if fully set forth herein.

I DO SOLEMNLY DECLARE AND AFFIRM UNDER THE PENALTIES OF PERJURY THAT THE CONTENTS OF THIS AFFIDAVIT ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE, INFORMATION, AND BELIEF.

Date: __________________________

By:

(Print name of Authorized Representative and Affiant)

____________________________

(Signature of Authorized Representative and Affiant)

____________________________

(Company name)
SECTION 00 61 13.13

AIA DOCUMENT A312-2010

PERFORMANCE BOND
**Performance Bond**

**CONTRACTOR:**
(Name, legal status and address)

**SURETY:**
(Name, legal status and principal place of business)

**OWNER:**
(Name, legal status and address)

**CONSTRUCTION CONTRACT**
Date:
Amount: $
Description:
(Name and location)

**BOND**
Date:
(Not earlier than Construction Contract Date)
Amount: $
Modifications to this Bond: None See Section 16

**CONTRACTOR AS PRINCIPAL**
Company: (Corporate Seal)
Signature: __________________________
Name and Title: __________________________

**SURETY**
Company: (Corporate Seal)
Signature: __________________________
Name and Title: __________________________

(Any additional signatures appear on the last page of this Performance Bond.)

(FOR INFORMATION ONLY — Name, address and telephone)

**AGENT or BROKER:**

**OWNER’S REPRESENTATIVE:**
(Architect, Engineer or other party:)

**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.

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.
§ 1 The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.

§ 2 If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except when applicable to participate in a conference as provided in Section 3.

§ 3 If there is no Owner Default under the Construction Contract, the Surety’s obligation under this Bond shall arise after

1 the Owner first provides notice to the Contractor and the Surety that the Owner is considering declaring a Contractor Default. Such notice shall indicate whether the Owner is requesting a conference among the Owner, Contractor and Surety to discuss the Contractor’s performance. If the Owner does not request a conference, the Surety may, within five (5) business days after receipt of the Owner’s notice, request such a conference. If the Surety timely requests a conference, the Owner shall attend. Unless the Owner agrees otherwise, any conference requested under this Section 3.1 shall be held within ten (10) business days of the Surety’s receipt of the Owner’s notice. If the Owner, the Contractor and the Surety agree, the Contractor shall be allowed a reasonable time to perform the Construction Contract, but such an agreement shall not waive the Owner’s right, if any, subsequently to declare a Contractor Default;

2 the Owner declares a Contractor Default, terminates the Construction Contract and notifies the Surety; and

3 the Owner has agreed to pay the Balance of the Contract Price in accordance with the terms of the Construction Contract to the Surety or to a contractor selected to perform the Construction Contract.

§ 4 Failure on the part of the Owner to comply with the notice requirement in Section 3.1 shall not constitute a failure to comply with a condition precedent to the Surety’s obligations, or release the Surety from its obligations, except to the extent the Surety demonstrates actual prejudice.

§ 5 When the Owner has satisfied the conditions of Section 3, the Surety shall promptly and at the Surety’s expense take one of the following actions:

§ 5.1 Arrange for the Contractor, with the consent of the Owner, to perform and complete the Construction Contract;

§ 5.2 Undertake to perform and complete the Construction Contract itself, through its agents or independent contractors;

§ 5.3 Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the Owner and a contractor selected with the Owner’s concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Section 7 in excess of the Balance of the Contract Price incurred by the Owner as a result of the Contractor Default; or

§ 5.4 Waive its right to perform and complete, arrange for completion, or obtain a new contractor and with reasonable promptness under the circumstances:

1 After investigation, determine the amount for which it may be liable to the Owner and, as soon as practicable after the amount is determined, make payment to the Owner; or

2 Deny liability in whole or in part and notify the Owner, citing the reasons for denial.

§ 6 If the Surety does not proceed as provided in Section 5 with reasonable promptness, the Surety shall be deemed to be in default on this Bond seven days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Section 5.4, and the Owner refuses the payment or the Surety has denied liability, in whole or in part, without further notice the Owner shall be entitled to enforce any remedy available to the Owner.
§ 7 If the Surety elects to act under Section 5.1, 5.2 or 5.3, then the responsibilities of the Surety to the Owner shall not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety shall not be greater than those of the Owner under the Construction Contract. Subject to the commitment by the Owner to pay the Balance of the Contract Price, the Surety is obligated, without duplication, for

.1 the responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;
.2 additional legal, design professional and delay costs resulting from the Contractor’s Default, and resulting from the actions or failure to act of the Surety under Section 5; and
.3 liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.

§ 8 If the Surety elects to act under Section 5.1, 5.3 or 5.4, the Surety’s liability is limited to the amount of this Bond.

§ 9 The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Construction Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than the Owner or its heirs, executors, administrators, successors and assigns.

§ 10 The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.

§ 11 Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and shall be instituted within two years after a declaration of Contractor Default or within two years after the Contractor ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

§ 12 Notice to the Surety, the Owner or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears.

§ 13 When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

§ 14 Definitions

§ 14.1 Balance of the Contract Price. The total amount payable by the Owner to the Contractor under the Construction Contract after all proper adjustments have been made, including allowance to the Contractor of any amounts received or to be received by the Owner in settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract.

§ 14.2 Construction Contract. The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and changes made to the agreement and the Contract Documents.

§ 14.3 Contractor Default. Failure of the Contractor, which has not been remedied or waived, to perform or otherwise to comply with a material term of the Construction Contract.

§ 14.4 Owner Default. Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

§ 14.5 Contract Documents. All the documents that comprise the agreement between the Owner and Contractor.
§ 15 If this Bond is issued for an agreement between a Contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

§ 16 Modifications to this bond are as follows:

(Space is provided below for additional signatures of added parties, other than those appearing on the cover page.)

CONTRACTOR AS PRINCIPAL
Company: (Corporate Seal)  
Signature:  
Name and Title:  
Address:  

SURETY
Company: (Corporate Seal)  
Signature:  
Name and Title:  
Address:  

User Notes: (1750432116)
Additions and Deletions Report for
AIA® Document A312™ – 2010

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 11:49:30 on 10/09/2012.

There are no differences.
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 11:49:30 on 10/09/2012 under Order No. 5820952305_1 from AIA Contract Documents software and that in preparing the attached final document I made no changes to the original text of AIA® Document A312™ – 2010, Performance Bond, as published by the AIA in its software, other than those additions and deletions shown in the associated Additions and Deletions Report.

(Signed)

(Title)

(Dated)
SECTION 00 61 13.16
AIA DOCUMENT A312-2010
PAYMENT BOND
CONTRACTOR:
(Name, legal status and address)

SURETY:
(Name, legal status and principal place of business)

OWNER:
(Name, legal status and address)

CONSTRUCTION CONTRACT
Date:
Amount: $ 
Description:
(Name and location)

BOND
Date:
(Not earlier than Construction Contract Date)

Amount: $ 
Modifications to this Bond:  None  See Section 18

CONTRACTOR AS PRINCIPAL  SURETY
Company:  (Corporate Seal)  Company:  (Corporate Seal)

Signature:  Name and Title: 
Signature:  Name and Title: 

(Any additional signatures appear on the last page of this Payment Bond.)

(FOR INFORMATION ONLY — Name, address and telephone)
AGENT or BROKER:  OWNER'S REPRESENTATIVE:  
(ARCHITECT, ENGINEER or other party: )

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.

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.
§ 1 The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner to pay for labor, materials and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference, subject to the following terms.

§ 2 If the Contractor promptly makes payment of all sums due to Claimants, and defends, indemnifies and holds harmless the Owner from claims, demands, liens or suits by any person or entity seeking payment for labor, materials or equipment furnished for use in the performance of the Construction Contract, then the Surety and the Contractor shall have no obligation under this Bond.

§ 3 If there is no Owner Default under the Construction Contract, the Surety’s obligation to the Owner under this Bond shall arise after the Owner has promptly notified the Contractor and the Surety (at the address described in Section 13) of claims, demands, liens or suits against the Owner or the Owner’s property by any person or entity seeking payment for labor, materials or equipment furnished for use in the performance of the Construction Contract and tendered defense of such claims, demands, liens or suits to the Contractor and the Surety.

§ 4 When the Owner has satisfied the conditions in Section 3, the Surety shall promptly and at the Surety’s expense defend, indemnify and hold harmless the Owner against a duly tendered claim, demand, lien or suit.

§ 5 The Surety’s obligations to a Claimant under this Bond shall arise after the following:

§ 5.1 Claimants, who do not have a direct contract with the Contractor, have furnished a written notice of non-payment to the Contractor, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were, or equipment was, furnished or supplied or for whom the labor was done or performed, within ninety (90) days after having last performed labor or last furnished materials or equipment included in the Claim; and

§ 5.2 Claimants, who are employed by or have a direct contract with the Contractor, have sent a Claim to the Surety (at the address described in Section 13).

§ 6 If a notice of non-payment required by Section 5.1.1 is given by the Owner to the Contractor, that is sufficient to satisfy a Claimant’s obligation to furnish a written notice of non-payment under Section 5.1.1.

§ 7 When a Claimant has satisfied the conditions of Sections 5.1 or 5.2, whichever is applicable, the Surety shall promptly and at the Surety’s expense take the following actions:

§ 7.1 Send an answer to the Claimant, with a copy to the Owner, within sixty (60) days after receipt of the Claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed; and

§ 7.2 Pay or arrange for payment of any undisputed amounts.

§ 7.3 The Surety’s failure to discharge its obligations under Section 7.1 or Section 7.2 shall not be deemed to constitute a waiver of defenses the Surety or Contractor may have or acquire as to a Claim, except as to undisputed amounts for which the Surety and Claimant have reached agreement. If, however, the Surety fails to discharge its obligations under Section 7.1 or Section 7.2, the Surety shall indemnify the Claimant for the reasonable attorney’s fees the Claimant incurs thereafter to recover any sums found to be due and owing to the Claimant.

§ 8 The Surety’s total obligation shall not exceed the amount of this Bond, plus the amount of reasonable attorney’s fees provided under Section 7.3, and the amount of this Bond shall be credited for any payments made in good faith by the Surety.

§ 9 Amounts owed by the Owner to the Contractor under the Construction Contract shall be used for the performance of the Construction Contract and to satisfy claims, if any, under any construction performance bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfy obligations of the Contractor and Surety under this Bond, subject to the Owner’s priority to use the funds for the completion of the work.
§ 10 The Surety shall not be liable to the Owner, Claimants or others for obligations of the Contractor that are unrelated to the Construction Contract. The Owner shall not be liable for the payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligation to make payments to, or give notice on behalf of, Claimants or otherwise have any obligations to Claimants under this Bond.

§ 11 The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.

§ 12 No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the state in which the project that is the subject of the Construction Contract is located or after the expiration of one year from the date (1) on which the Claimant sent a Claim to the Surety pursuant to Section 5.1.2 or 5.2, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

§ 13 Notice and Claims to the Surety, the Owner or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears. Actual receipt of notice or Claims, however accomplished, shall be sufficient compliance as of the date received.

§ 14 When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

§ 15 Upon request by any person or entity appearing to be a potential beneficiary of this Bond, the Contractor and Owner shall promptly furnish a copy of this Bond or shall permit a copy to be made.

§ 16 Definitions
§ 16.1 Claim. A written statement by the Claimant including at a minimum:
1. the name of the Claimant;
2. the name of the person for whom the labor was done, or materials or equipment furnished;
3. a copy of the agreement or purchase order pursuant to which labor, materials or equipment was furnished for use in the performance of the Construction Contract;
4. a brief description of the labor, materials or equipment furnished;
5. the date on which the Claimant last performed labor or last furnished materials or equipment for use in the performance of the Construction Contract;
6. the total amount earned by the Claimant for labor, materials or equipment furnished as of the date of the Claim;
7. the total amount of previous payments received by the Claimant; and
8. the total amount due and unpaid to the Claimant for labor, materials or equipment furnished as of the date of the Claim.

§ 16.2 Claimant. An individual or entity having a direct contract with the Contractor or with a subcontractor of the Contractor to furnish labor, materials or equipment for use in the performance of the Construction Contract. The term Claimant also includes any individual or entity that has rightfully asserted a claim under an applicable mechanic’s lien or similar statute against the real property upon which the Project is located. The intent of this Bond shall be to include without limitation in the terms "labor, materials or equipment" that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental equipment used in the Construction Contract, architectural and engineering services required for performance of the work of the Contractor and the Contractor’s subcontractors, and all other items for which a mechanic’s lien may be asserted in the jurisdiction where the labor, materials or equipment were furnished.

§ 16.3 Construction Contract. The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and all changes made to the agreement and the Contract Documents.
§ 16.4 Owner Default. Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

§ 16.5 Contract Documents. All the documents that comprise the agreement between the Owner and Contractor.

§ 17 If this Bond is issued for an agreement between a Contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

§ 18 Modifications to this bond are as follows:

(Space is provided below for additional signatures of added parties, other than those appearing on the cover page.)

CONTRACTOR AS PRINCIPAL
Company: (Corporate Seal)
Signature: ____________________________
Name and Title: _______________________
Address: ____________________________

SURETY
Company: (Corporate Seal)
Signature: ____________________________
Name and Title: _______________________
Address: ____________________________
Additions and Deletions Report for
AIA® Document A312™ – 2010

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 11:43:03 on 10/09/2012.

There are no differences.
Certification of Document’s Authenticity
AIA® Document D401™ – 2003

I, [name], 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 11:43:03 on 10/09/2012 under Order No. 5820952305_1 from AIA Contract Documents software and that in preparing the attached final document I made no changes to the original text of AIA® Document A312™ – 2010, Payment Bond, as published by the AIA in its software, other than those additions and deletions shown in the associated Additions and Deletions Report.

(Signed)

(Title)

(Dated)
SECTION 00 62 76


PAY APPLICATION
Application and Certificate for Payment

TO OWNER:  Washington County Public Schools  
82 Commonwealth Avenue  
Hagerstown, MD 21740

FROM CONTRACTOR:  

PROJECT:  

APPLICATION NO: 001
PERIOD TO:  

ARCHITECT:

CONTRACT FOR: General Construction

PROJECT NOS:  / / 

FIELD:  

OTHER:  

The undersigned Contractor certifies that to the best of the Contractor's knowledge, information and belief the Work covered by this Application for Payment has been completed in accordance with the Contract Documents, that all amounts have been paid by the Contractor for Work for which previous Certificates for Payment were issued and payments received from the Owner, and that current payment shown herein is now due.

**CONTRACTOR'S APPLICATION FOR PAYMENT**

Application is made for payment, as shown below, in connection with the Contract. Continuation Sheet, AIA Document G703, is attached.

1. ORIGINAL CONTRACT SUM .......................................... $ 0.00
2. Net change by Change Orders ......................................... $ 0.00
3. CONTRACT SUM TO DATE (Line 1 ± 2) ................................ $ 0.00
4. TOTAL COMPLETED & STORED TO DATE (Column G on G703) ................................ $ 0.00

5. RETAINAGE:
   a. 0 % of Completed Work  
      (Column D + E on G703) $ 0.00
   b. 0 % of Stored Material  
      (Column F on G703) $ 0.00
   Total Retainage (Lines 5a + 5b or Total in Column I of G703) .......... $ 0.00

6. TOTAL EARNED LESS RETAINAGE ..................................... $ 0.00
   (Line 4 Less Line 5 Total)

7. LESS PREVIOUS CERTIFICATES FOR PAYMENT ........................ $ 0.00
   (Line 6 from prior Certificate)

8. CURRENT PAYMENT DUE ................................................ $ 0.00

9. BALANCE TO FINISH, INCLUDING RETAINAGE ........................ $ 0.00
   (Line 3 less Line 6)

**CHANGE ORDER SUMMARY**

<table>
<thead>
<tr>
<th>CHANGE ORDER SUMMARY</th>
<th>ADDITIONS</th>
<th>DEDUCTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total changes approved in previous months by Owner</td>
<td>$ 0.00</td>
<td>$ 0.00</td>
</tr>
<tr>
<td>Total approved this Month</td>
<td>$ 0.00</td>
<td>$ 0.00</td>
</tr>
<tr>
<td>TOTALS</td>
<td>$ 0.00</td>
<td>$ 0.00</td>
</tr>
<tr>
<td>NET CHANGES by Change Order</td>
<td>$ 0.00</td>
<td>$ 0.00</td>
</tr>
</tbody>
</table>

ARCHITECT'S CERTIFICATE FOR PAYMENT

In accordance with the Contract Documents, based on on-site observations and the data comprising this application, the Architect certifies to the Owner that to the best of the Architect's knowledge, information and belief the Work has progressed as indicated, the quality of the Work is in accordance with the Contract Documents, and the Contractor is entitled to payment of the AMOUNT CERTIFIED.

AMOUNT CERTIFIED ..................................................... $ 0.00

(Attach explanation if amount certified differs from the amount applied. Initial all figures on this Application and on the Continuation Sheet that are changed to conform with the amount certified.)

ARCHITECT:

By: ___________________________ Date: ___________________________

This Certificate is not negotiable. The AMOUNT CERTIFIED is payable only to the Contractor named herein. Issuance, payment and acceptance of payment are without prejudice to any rights of the Owner or Contractor under this Contract.
Continuation Sheet

AIA Document G702, APPLICATION AND CERTIFICATION FOR PAYMENT, containing Contractor's signed certification is attached. In tabulations below, amounts are stated to the nearest dollar. Use Column I on Contracts where variable retainage for line items may apply.

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>DESCRIPTION OF WORK</th>
<th>SCHEDULED VALUE</th>
<th>WORK COMPLETED FROM PREVIOUS APPLICATION (D+E)</th>
<th>WORK COMPLETED THIS PERIOD</th>
<th>MATERIALS PRESENTLY STORED (NOT IN D OR E)</th>
<th>TOTAL COMPLETED AND STORED TO DATE (D+E+F)</th>
<th>% (G ÷ C)</th>
<th>BALANCE TO FINISH (C - G)</th>
<th>RETAINAGE (IF VARIABLE RATE)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GRAND TOTAL</td>
<td>$ 0.00</td>
<td>$ 0.00</td>
<td>$ 0.00</td>
<td>$ 0.00</td>
<td>$ 0.00</td>
<td>0.00 %</td>
<td>$ 0.00</td>
<td>$ 0.00</td>
</tr>
</tbody>
</table>

GRAND TOTAL $ 0.00

APPLICATION NO: 001
APPLICATION DATE:
PERIOD TO:
ARCHITECT'S PROJECT NO:
SECTION 00 65 16

AIA DOCUMENT G704-2000

CERTIFICATE OF SUBSTANTIAL COMPLETION
Certificate of Substantial Completion

PROJECT: (Name and address)  PROJECT NUMBER: /  CONTRACT FOR: General Construction  CONTRACT DATE:

TO OWNER: (Name and address)  TO CONTRACTOR: (Name and address)

PROJECT OR PORTION OF THE PROJECT DESIGNATED FOR PARTIAL OCCUPANCY OR USE SHALL INCLUDE:

The Work performed under this Contract has been reviewed and found, to the Architect’s best knowledge, information and belief, to be substantially complete. Substantial Completion is the stage in the progress of the Work when the Work or designated portion is sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work for its intended use. The date of Substantial Completion of the Project or portion designated above is the date of issuance established by this Certificate, which is also the date of commencement of applicable warranties required by the Contract Documents, except as stated below:

Warranty                   Date of Commencement

ARCHITECT ________________________________ BY ________________________________ DATE OF ISSUANCE ________________________________

A list of items to be completed or corrected is attached hereto. The failure to include any items on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents. Unless otherwise agreed to in writing, the date of commencement of warranties for items on the attached list will be the date of issuance of the final Certificate of Payment or the date of final payment.

Cost estimate of Work that is incomplete or defective: $0.00

The Contractor will complete or correct the Work on the list of items attached hereto within Zero (0) days from the above date of Substantial Completion.

CONTRACTOR ________________________________ BY ________________________________ DATE ________________________________

The Owner accepts the Work or designated portion as substantially complete and will assume full possession at (time) on (date).

OWNER ________________________________ BY ________________________________ DATE ________________________________

The responsibilities of the Owner and Contractor for security, maintenance, heat, utilities, damage to the Work and insurance shall be as follows:

(Note: Owner’s and Contractor’s legal and insurance counsel should determine and review insurance requirements and coverage.)
for the following PROJECT:
(Name and location or address):

THE OWNER:
(Name and address):

THE ARCHITECT:
(Name and address):

ADDITIONS AND DELETIONS:
The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An Additions and Deletions Report that notes added information as well as revisions to the standard form text is available from the author and should be reviewed. A vertical line in the left margin of this document indicates where the author has added necessary information and where the author has added 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.

This document has been approved and endorsed by The Associated General Contractors of America.
INDEX
(Numbers and Topics 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
4.2.3, 10
Acts and Omissions
3.2, 3.3.2, 3.12.8, 3.18, 4.2.3, 4.3.8, 4.4.1, 8.3.1
9.5.1, 10.2.5, 13.4.2, 13.7, 14.1
Addenda
1.1.1, 3.11
Additional Costs, Claims for
4.3.4, 4.3.5, 4.3.6, 6.1.1, 10.3
Additional Inspections and Testing
9.8.3, 12.2.1, 13.5
Additional Time, Claims for
4.3.4, 4.3.7, 8.3.2
ADMINISTRATION OF THE CONTRACT
3.1.3, 4, 9.4.4, 9.5
Advertisement or Invitation to Bid
1.1.1
Aesthetic Effect
4.2.13, 4.5.1
Allowances
3.8
All-risk Insurance
11.4.1.1
Applications for Payment
4.2.5, 7.3.8, 9.2, 9.3, 9.4, 9.5.1, 9.6.3, 9.7.1, 9.8.5, 9.10, 11.1.13, 14.2.4, 14.4.3
Approvals
2.4, 3.1.3, 3.5, 3.10.2, 3.12, 4.2.7, 9.3.2, 13.4.2, 13.5
Arbitration
4.3.3, 4.4, 4.5.1, 4.5.2, 4.6, 8.3.1, 9.7.1, 11.4.9, 11.4.10
Architect
4.1
Architect, Definition of
4.1.1
Architect, Extent of Authority
2.4, 3.12.7, 4.2, 4.3.6, 4.4.5.2, 6.3, 7.1.2, 7.3.6, 7.4, 9.2, 9.3.1, 9.4, 9.5, 9.8.3, 9.10.1, 9.10.3, 12.1, 12.2.1, 13.5.1, 13.5.2, 14.2.2, 14.2.4
Architect, Limitations of Authority and Responsibility
2.1.1, 3.3.3, 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, 4.4, 5.2.1, 7.4, 9.4.2, 9.6.4, 9.6.6
Architect’s Additional Services and Expenses
2.4, 11.4.1.1, 12.2.1, 13.5.2, 13.5.3, 14.2.4
Architect’s Administration of the Contract
3.1.3, 4.2, 4.3.4, 4.4, 9.4, 9.5
Architect’s Approvals
2.4, 3.1.3, 3.5.1, 3.9.2, 4.2.7
Architect’s Authority to Reject Work
3.5.1, 4.2.6, 12.1.2, 12.2.1
Architect’s Copyright
1.6
Architect’s Decisions
4.2.6, 4.2.7, 4.2.11, 4.2.12, 4.2.13, 4.3.4, 4.4.1, 4.4.5, 4.4.6, 4.5, 6.3, 7.3.6, 7.3.8, 8.1.3, 8.3.1, 9.2.2, 9.4, 9.5.1, 9.8.4, 9.9.1, 13.5.2, 14.2.2, 14.2.4
Architect’s Inspections
4.2.2, 4.2.9, 4.3.4, 9.4, 9.8.3, 9.9.2, 9.10.1, 13.5
Architect’s Instructions
3.2.3, 3.3.1, 4.2.6, 4.2.7, 4.2.8, 7.4.1, 12.1, 13.5.2
Architect’s Interpretations
4.2.11, 4.2.12, 4.3.6
Architect’s Project Representative
4.2.10
Architect’s Relationship with Contractor
1.1.2, 1.6, 3.1, 3.2.1, 3.2.2, 3.2.3, 3.3.1, 3.4.2, 3.5.1, 3.7.3, 3.10, 3.11, 3.12, 3.16, 3.18, 4.1.2, 4.1.3, 4.2, 4.3.4, 4.4.1, 4.4.7, 5.2, 6.2.2, 7.3.1, 9.2, 9.3.9, 9.4, 9.5, 9.7, 9.8, 9.9, 10.2.6, 10.3, 11.3, 11.4.7, 12, 13.4.2, 13.5
Architect’s Relationship with Subcontractors
1.1.2, 4.2.3, 4.2.4, 4.2.6, 9.6.3, 9.6.4, 11.4.7
Architect’s Representations
9.4.2, 9.5.1, 9.10.1
Architect’s Site Visits
4.2.2, 4.2.5, 4.2.9, 4.3.4, 9.4.2, 9.5.1, 9.9.2, 9.10.1, 13.5
Asbestos
10.3.1
Attorneys’ Fees
3.18.1, 9.10.2, 10.3.3
Award of 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, 1.1.7, 5.2.1, 11.5.1
Boiler and Machinery Insurance
11.4.2
Bonds, Lien
9.10.2
Bonds, Performance, and Payment
7.3.6.4, 9.7.6.7, 9.10.3, 11.4.9, 11.5
Building Permit
3.7.1
Capitalization
1.3
Certificate of Substantial Completion
9.8.3, 9.8.4, 9.8.5
Certificates for Payment
4.2.5, 4.2.9, 9.3.3, 9.4, 9.5, 9.6.1, 9.6.6, 9.7.1, 9.10.1,
9.10.3, 13.7, 14.1.1.3, 14.2.4
Certificates of Inspection, Testing or Approval
13.5.4
Certificates of Insurance
9.10.2, 11.1.3
Change Orders
1.1.1, 2.4.1, 3.4.2, 3.8.23, 3.11.1, 3.12.8, 4.2.8, 4.3.4,
4.3.9, 5.2.3, 7.1, 7.2, 7.3, 8.3.1, 9.3.1.1, 9.10.3,
11.4.1.2, 11.4.4, 11.4.9, 12.1.2
Change Orders, Definition of
7.2.1
CHANGES IN THE WORK
3.11, 4.2.8, 7, 8.3.1.1, 9.3.1.1, 11.4.9
Claim, Definition of
4.3.1
Claims and Disputes
3.2.3, 4.3.4, 4.4.4.5, 4.6, 6.1.1, 6.3, 7.3.8, 9.3.3, 9.10.4,
10.3.3
Claims and Timely Assertion of Claims
4.6.5
Claims for Additional Cost
3.2.3, 4.3.4, 4.3.5, 4.3.6, 6.1.1, 7.3.8, 10.3.2
Claims for Additional Time
3.2.3, 4.3.4, 4.3.7, 6.1.1, 8.3.2, 10.3.2
Claims for Conceived or Unknown Conditions
4.3.4
Claims for Damages
3.2.3, 3.18, 4.3.10, 6.1.1, 8.3.3, 9.5.1, 9.6.7, 10.3.3,
11.1.1, 11.4.5, 11.4.7, 14.1.3, 14.2.4
Claims Subject to Arbitration
4.4.1, 4.5.1, 4.6.1
Cleaning Up
3.15, 6.3
Commencement of Statutory Limitation Period
13.7
Commencement of the Work, Conditions Relating to
2.2.1, 3.2.1, 3.4.1, 3.7.1, 3.10.1, 3.12.6, 4.3.5, 5.2.1,
5.2.3, 6.2.2, 8.1.2, 8.2.2, 8.3.1, 11.1, 11.4.1, 11.4.6,
11.5.1
Commencement of the Work, Definition of
8.1.2
Communications Facilitating Contract
Administration
3.9.1, 4.2.4
Completion, Conditions Relating to
1.6.1, 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, 13.7, 14.1.2
COMPLETION, PAYMENTS AND
9.1
Completion, Substantial
4.2.9, 8.1.1, 8.1.3, 8.2.3, 9.4.2, 9.8, 9.9.1, 9.10.3,
9.10.4.2, 12.2, 13.7
Compliance with Laws
1.6.1, 3.2.2, 3.6, 3.7, 3.12.10, 3.13, 4.1.1, 4.4.8, 4.6.4,
4.6.6, 9.6.4, 10.2.2, 11.1, 12.14.1.3, 13.4, 13.5.1,
13.5.2, 13.6, 14.1.1, 14.2.1.3
Conceived or Unknown Conditions
4.3.4, 8.3.1, 10.3.3
Conditions of the Contract
1.1.1, 11.1.7, 6.1.1, 6.1.4
Consent, Written
1.6, 3.4.2, 3.12.8, 3.14.2, 4.1.2, 4.3.4, 4.6.4, 9.3.2,
9.8.5, 9.1.1, 9.10.2, 9.10.3, 11.4.1, 13.2, 13.4.2
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, 3.12.8, 4.2.8, 4.3.9, 7.1, 7.3, 9.3.1.1
Construction Schedules, Contractor's
1.4.1.2, 3.10, 3.12.1, 3.13.2, 4.3.7, 6.1.3
Contingent Assignment of Subcontracts
5.4, 14.2.2.2
 Continuing Contract Performance
4.3.3
Contract, Definition of
1.1.2
 CONTRACT, TERMINATION OR
 SUSPENSION OF THE
5.4.1.1, 11.4.9, 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, 11.1.3, 11.4.6, 11.5.1
Contract Documents, The
1.1, 1.2
Contract Documents, Copies Furnished and Use of
1.6, 2.2.5, 5.3
Contract Documents, Definition of
1.1.1
Contract Sum
3.8, 4.3.4, 4.3.5, 4.4.5, 5.2.3, 7.2, 7.3, 7.4, 9.1, 9.4.2,
9.5.1.4, 9.6.7, 9.7, 10.3.2, 11.4.1, 14.2.4, 14.3.2
Contract Sum, Definition of
9.1
Contract Time
4.3.4, 4.3.7, 4.4.5, 5.2.3, 7.2.1.3, 7.3, 7.4, 8.1.1, 8.2,
8.3.1, 9.5.1, 9.7, 10.3.2, 12.1.1, 14.3.2
Contract Time, Definition of
8.1.1
CONTRACTOR
3
Contractor, Definition of
3.1, 6.1.2
Contractor's Construction Schedules
1.4.1.2, 3.10, 3.12.1, 3.13.2, 4.3.7, 6.1.3
Contractor's Employees
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, 6.1.14, 11.2.12, 12.2.4
Contractor's Relationship with Subcontractors
1.2.2, 3.3.2, 3.18.1, 3.18.2, 5.9.6.2, 9.9.6.7, 9.10.2, 11.4.12, 11.4.7, 11.4.8
Contractor's Relationship with the Architect
1.1.2.1, 3.1.3, 3.2.1, 3.2.2, 3.2.3, 3.3.1, 3.4.2, 3.5.1, 3.7.3, 3.10, 3.11, 3.12, 5.16, 3.18, 4.1.2, 4.1.3, 4.2, 4.3.4, 4.4.1, 4.4.7, 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, 11.4.7, 12, 13.4.2, 13.5
Contractor's Representations
1.5.2, 3.5.1, 3.12.6, 6.2.2, 8.2.1, 9.3.3, 9.8.2
Contractor's Responsibility for Those Performing the Work
3.2.2, 3.18, 4.2.3, 4.3.8, 5.3.1, 6.1.3, 6.2, 6.3, 9.5.1, 10
Contractor's Review of Contract Documents
1.5.2, 3.2, 3.7.3
Contractor's Right to Stop the Work
9.7
Contractor's Right to Terminate the Contract
4.3.10, 14.1
Contractor's Submittals
3.10, 3.11, 3.12, 4.2.7, 5.2.1, 5.2.2, 7.3.6, 9.2, 9.3, 9.8.2, 9.9.1, 9.9.1, 9.10.2, 9.10.3, 11.1.3, 11.5.2
Contractor's Superintendent
3.9, 10.2.6
Contractor's Supervision and Construction Procedures
1.2.2, 3.3, 3.4, 3.12.1, 4.2.2, 4.2.7, 4.3.3, 5.1.3, 6.1.3, 6.2.4, 7.1.3, 7.3.4, 7.3.6, 8.2, 10, 12, 14
Contractual Liability Insurance
11.1.1.8, 11.2, 11.3
Coordination and Correlation
1.2, 1.5.2, 3.3.1, 3.10, 3.12.6, 6.1.3, 6.2.1
Copies Furnished of Drawings and Specifications
1.6, 2.2.5, 3.11
Copyrights
1.6, 3.17
Correction of Work
2.3, 2.4.2.4, 3.7.4, 4.2.1, 9.4.2, 9.8.2, 9.8.3, 9.9.1, 12.1.2, 12.2, 13.7.1.3
Correlation and Intent of the Contract Documents
1.2
Cost, Definition of
7.3.6
Costs
2.4, 3.2.3, 3.7.4, 3.8.2, 3.15.2, 4.3, 5.4.2, 6.1.1, 6.2.3, 7.3.3, 7.3.6, 7.3.7, 7.3.8, 9.10.2, 10.3.2, 10.5.3, 11.4, 12.1, 12.2.1, 12.2.4, 13.5, 14
Cutting and Patching
6.2.5, 3.14
Damage to Construction of Owner or Separate Contractors
3.14.2, 6.2.4, 9.2.1.5, 10.2.1.2, 10.2.5, 10.6, 11.1, 11.4, 12.2.4
Damage to the Work
3.14.2, 9.9.1, 10.2.1.2, 10.2.5, 10.6, 11.4, 12.2.4
Damages, Claims for
3.2.2, 3.18, 4.3.10, 6.1.1, 8.3.3, 9.5.1, 9.6.7, 10.3.3, 11.1.1, 11.4.5, 11.4.7, 14.1.3, 14.2.4
Damages for Delay
6.1.1, 8.3.3, 9.5.1.6, 9.7, 10.3.2
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
4.2.6, 4.2.7, 4.2.11, 4.2.12, 4.2.13, 4.3.4, 4.4.1, 4.4.5, 4.4.6, 4.5.3, 7.3.6, 7.3.8, 8.1.3, 8.3.1, 9.2, 9.4, 9.5.1, 9.8.4, 9.9.1, 13.5.2, 14.2.2, 14.2.4
Decisions to Withhold Certification
9.4.1, 9.5, 9.7, 14.1.1.3
Defective or Nonconforming Work, Acceptance, Rejection and Correction of
2.3, 2.4, 3.5.1, 4.2.6, 6.2.5, 9.5.1, 9.5.2, 9.6.1, 9.6.2, 9.8.2, 9.9.3, 9.10.4, 12.2.1, 13.7.1.3
Defective Work, Definition of
3.5.1
Definitions
1.1, 2.1.1, 3.1, 3.5.1, 3.12.1, 3.12.2, 3.12.3, 4.1.1, 4.3.1.1, 5.1, 6.1.2, 7.2.1, 7.3.1, 7.3.6, 8.1, 9.1, 9.8.1
Delays and Extensions of Time
3.2.2, 4.3.1, 4.3.4, 4.3.7, 4.4.5, 5.2.3, 7.2.1, 7.3.1, 7.4.1, 8.3, 9.5.1, 9.7.1, 10.3.2, 10.6.1, 14.3.2
Disputes
4.1.4, 4.3.4, 4.4.5, 4.6.3, 7.3.8
Documents and Samples at the Site
3.11
Drawings, Definition of
1.1.5
Drawings and Specifications. Use and Ownership of
1.1.1, 1.3, 2.2.5, 3.11, 5.3
Effective Date of Insurance
8.2.2, 11.1.2
Emergencies
4.3.5, 10.6, 14.1.1.2
Employees, Contractor's
3.3.2, 3.8.3, 3.8.1, 3.9, 3.18.2, 4.2.3, 4.2.6, 10.2, 10.3, 11.1.1, 11.4.7, 14.1, 14.2.1.1
Equipment, Labor, Materials and
1.1.3, 1.1.6, 3.4, 3.5.1, 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, 7.3.6, 9.3.2, 9.3.3, 9.5.1.3, 9.10.2, 10.2.1, 10.2.4, 14.2.1.2
Execution and Progress of the Work
GENERAL PROVISIONS

1 Governing Law

13.1 Guarantees (See Warranty)
Hazardous Materials
10.2.4, 10.3, 10.5 Identification of Contract Documents
15.1 Identification of Subcontractors and Suppliers
5.2.1 Indemnification
3.17, 3.18, 9.10.2, 10.3.3, 10.5, 11.4.12, 11.4.7 Information and Services Required of the Owner
2.1.2, 2.2.3, 3.13, 3.12.4, 3.12.10, 4.2.7, 4.3.3, 6.1.3, 6.1.4, 6.2.5, 9.3.2, 9.6.1, 9.6.4, 9.9.2, 9.10.3, 9.10.3.3, 11.2, 11.3, 13.5.1, 13.5.2, 14.1.1.4, 14.1.4 Injury or Damage to Person or Property
4.3.8, 10.2, 10.6 Inspections
3.1.3, 3.3.3, 3.7.1, 4.2.2, 4.2.6, 4.2.9, 9.4.2, 9.8.2, 9.8.3, 9.9.2, 9.10.1, 12.2.1, 13.5 Instructions to Bidders
1.1.1 Instructions to the Contractor
3.2.3, 3.3.1, 3.6.1, 4.2.8, 5.2.1, 7.12, 8.2.2, 13.5.2 Insurance
3.18.1, 6.1.1, 7.3.6, 8.2.1, 9.3.2, 9.8.4, 9.9.1, 9.10.2, 9.10.5, 11 Insurance, Boiler and Machinery
11.4.2 Insurance, Contractor's Liability
11.1 Insurance, Effective Date of
8.2.2, 11.1.2 Insurance, Loss of Use
11.4.3 Insurance, Owner's Liability
11.2 Insurance, Project Management Protective
Liability
11.3 Insurance, Property
10.2.5, 11.4 Insurance, Stored Materials
9.3.2, 11.4.1.4 INSURANCE AND BONDS
11 Insurance Companies, Consent to Partial Occupancy
9.9.1, 11.4.1.5 Insurance Companies, Settlement with
11.4.10 Intent of the Contract Documents
1.2.1, 4.2.7, 4.2.12, 4.2.13, 7.4 Interest
13.6 Interpretation
1.2.3, 1.4, 4.1.1, 4.3.1, 5.1, 6.1.2, 8.1.4 Interpretations, Written
4.2.11, 4.2.12, 4.3.6 Joinder and Consolidation of Claims Required
4.6.4 Judgment on Final Award
4.6.6 Labor and Materials, Equipment
1.1.3, 1.1.6, 3.4, 3.5.1, 3.8.2, 3.8.3, 3.12, 3.13, 3.15.1, 42.6, 4.2.7, 5.2.1, 6.2.1, 7.3.6, 9.3.2, 9.3.3, 9.5.1.3, 9.10.2, 10.2.1, 10.2.4, 14.2.1.2 Labor Disputes
8.3.1 Laws and Regulations
1.6, 3.2.2, 3.6, 3.7, 3.12.10, 3.13, 4.1.1, 4.4.8, 4.6, 9.6.4, 9.9.1, 10.2.2, 11.1.1, 11.4, 13.1, 13.4, 13.5.1, 13.5.2, 13.6, 14 Liens
2.1.2, 4.4.8, 8.2.2, 9.3.3, 9.10 Limitation on Consolidation or Joinder
4.6.4 Limitations, Statutes of
4.6.3, 12.2.6, 13.7 Limitations of Liability
2.3, 3.2.1, 3.5.1, 3.7.3, 3.12.8, 3.12.10, 3.17, 3.18, 4.2.6, 4.2.7, 4.2.12, 6.2.2, 9.4.2, 9.6.4, 9.6.7, 9.10.4, 10.3.3, 10.2.5, 11.1.2, 11.2.1, 11.4.7, 12.2.5, 13.4.2 Limitations of Time
2.1.2, 2.2.2, 2.4, 3.2.1, 3.7.3, 3.10, 3.11, 3.12.5, 3.15.1, 4.2.7, 4.3, 4.4, 4.5, 4.6, 5.2, 5.3, 5.4, 6.2.4, 7.3.7, 8.2, 9.2, 9.3.1, 9.3.3, 9.4.1, 9.5, 9.5.6, 9.7, 9.8, 9.9, 9.10, 11.3, 11.4, 11.5, 11.4.6, 11.4.10, 12.2, 13.5, 13.7, 14 Loss of Use Insurance
11.4.3 Material Suppliers
1.6, 3.12.1, 4.2.4, 4.2.6, 5.2.1, 9.3, 9.4.2, 9.6, 9.10.5 Materials, Hazardous
10.2.4, 10.3, 10.5
Materials, Labor, and Equipment and
1.1.1, 1.1.6, 1.2.1, 3.4.1, 3.5.1, 3.8.2, 3.8.23, 3.12.13, 3.15.1, 4.2.6, 4.2.7, 5.2.1, 6.2.1, 7.3.6, 9.3.2, 9.3.3, 9.5.1, 9.10.2, 10.2.1, 10.2.4, 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
Mechanics’ Lien
4.4.8
Mediation
4.4.1, 4.4.5, 4.4.6, 4.4.8, 4.5, 4.6.1, 4.6.2, 8.3.1, 10.5
Minor Changes in the Work
1.1.1, 1.12.8, 4.2.8, 4.3.6, 7.1, 7.4
MISCELLANEOUS PROVISIONS
13
Modifications, Definition of
1.1.1
Modifications to the Contract
1.1.1, 1.1.2, 3.7.3, 3.11.1, 4.1.2, 4.2.1, 5.2.3, 7.8.3.1, 9.7, 10.3.2, 11.4.1
Mutual Responsibility
6.2
Nonconforming Work, Acceptance of
9.6.6, 9.9.3, 12.3
Nonconforming Work, Rejection and Correction of
2.3, 2.4, 3.5.1, 4.2.6, 6.2.5, 9.5.1, 9.8.2, 9.9.3, 9.10.4, 12.2.1, 13.7.1.3
Notice
2.2.1, 2.3.1, 2.4, 3.2.3, 3.3.1, 3.7.2, 3.7.4, 3.12.9, 4.3, 4.4.8, 4.6.5, 5.2.1, 8.2.2, 9.7, 9.10, 10.2.2, 11.1.3, 11.4.6, 12.2.2, 12.2.4, 13.3, 13.5.1, 13.5.2, 14.1.1, 14.2
Notice, Written
2.3, 2.4, 3.3.1, 3.9, 3.12.9, 3.12.10, 4.3, 4.4.8, 4.6.5, 5.2.1, 8.2.2, 9.7, 9.10, 10.2.2, 10.3, 11.1.3, 11.4.6, 12.2.2, 12.2.4, 13.3, 13.5.1, 13.5.2, 14.1.1, 14.2
Notice of Testing and Inspections
13.5.1, 13.5.2
Notice to Proceed
8.2.2
Notices, Permits, Fees and
2.2.2, 3.7, 3.13, 7.3.6.4, 10.2.2
Observations, Contractor’s
1.5.2, 3.2, 3.7.3, 4.3.4
Occupancy
2.2.2, 9.6.6, 9.8, 11.4.1.5
Orders, Written
1.1.1, 2.3, 3.9, 4.3.6, 7.8.2.2, 11.4.9, 12.1, 12.2, 13.5.2, 14.3.1
OWNER
2
Owner, Definition of
2.1
Owner, Information and Services Required of the
2.1.2, 2.2, 3.2.1, 3.12.4, 3.12.10, 4.2.7, 4.3.3, 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, 11.4, 13.5.1, 13.5.2, 14.1.1.4, 14.1.4
Owner’s Authority
1.6, 2.1.1, 2.3, 2.4, 3.4.2, 3.8.1, 3.12.10, 3.14.2, 4.1.2, 4.1.3, 4.2.4, 4.2.9, 4.3.6, 4.4.7, 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, 9.3.1, 9.3.2, 9.5.1, 9.9.1, 9.10.2, 10.3.2, 11.1.3, 11.3.1, 11.4.3, 11.4.10, 12.2.2, 12.3.1, 13.2.2, 14.3, 14.4
Owner’s Financial Capability
2.2.1, 13.2.2, 14.1.1.5
Owner’s Liability Insurance
11.2
Owner’s Loss of Use Insurance
11.4.3
Owner’s Relationship with Subcontractors
1.1.2, 5.2.3, 5.4.9, 9.10.2, 14.2.2
Owner’s Right to Carry Out the Work
2.4, 12.2.4, 14.2.2.2
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
2.3
Owner’s Right to Suspend the Work
14.3
Owner’s Right to Terminate the Contract
14.2
Ownership and Use of Drawings, Specifications
and Other Instruments of Service
1.1.1, 1.6, 2.2.5, 3.2.1, 3.11.1, 3.17.1, 4.2.12, 5.3
Partial Occupancy or Use
9.6.6, 9.9, 11.4.1.5
Patching, Cutting and
3.14, 6.2.5
Patents
3.17
Payment, Applications for
4.2.5, 7.3.8, 9.2.9, 9.3, 9, 9.5.1, 9.6.3, 9.7.1, 9.8.5, 9.10.1, 9.10.3, 9.10.5, 11.1.3, 14.2.4, 14.4.3
Payment, Certificates for
4.2.5, 4.2.9, 3.3.3, 9.4, 9.5, 9.6.1, 9.6.6, 9.7.1, 9.10.1, 9.10.3, 13.7, 14.1.1.3, 14.2.4
Payment, Failure of
4.3.6, 9.5.1.3, 9.7, 9.10.2, 14.1.1.3, 14.2.1.2, 13.6
Payment, Final
4.2.1, 4.2.9, 4.3.2, 9.8.2, 9.10, 11.1.2, 11.1.3, 11.4.1, 11.4.5, 12.3.1, 13.7, 14.2.4, 14.4.3
Payment Bond, Performance Bond and
7.3.6.4, 9.6.7, 9.10.3, 11.4.9, 11.5
Payments, Progress
4.3.3, 9.3, 9.6, 9.8.5, 9.10.3, 13.6, 14.2.3
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, 11.4.8, 14.2.1.2
PCB
10.3.1
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, 2.3, 2.4, 3.5.1, 3.15.2, 4.2.6, 4.3.4, 4.5, 4.6, 5.3, 5.4, 6.1, 6.3, 7.3.1, 8.3, 9.5.1, 9.7, 10.2.5, 10.3.12.2.2, 12.2.4, 13.4.14
Royalties, Patents and Copyrights
3.17
Rules and Notices for Arbitration
4.6.2
Safety of Persons and Property
10.2, 10.6
Safety Precautions and Programs
3.1.1, 4.2.2, 4.2.7, 5.3.1, 10.1, 10.2, 10.6
Samples, Definition of
3.12.3
Samples, Shop Drawings, Product Data and Samples at the Site, Documents and
3.11
Schedule of Values
9.2, 9.3.1
Schedules
1.4.4.2, 3.10, 3.12, 4.2.2, 4.3.7.2, 6.1.3
Separate Contracts and Contractors
1.1.4, 3.12.5, 3.14.2, 4.2.4, 4.2.7, 4.6.4, 6, 8.3.1
11.4.7, 12.1.2, 12.2.5
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
1.2.2, 3.2.1, 3.3.3, 3.7.1, 4.2, 4.3.4, 9.4.2, 9.10.1, 13.5
Site Visits, Architect's
4.2.2, 4.2.9, 4.3.4, 9.4.2, 9.5.1, 9.9.2, 9.10.1, 13.5
Special Inspections and Testing
4.2.6, 12.2.1, 13.5
Specifications, Definition of the
1.1.6
Specifications, The
1.1.1, 1.1.6, 1.1.7, 1.2.2, 1.6.3, 3.11, 3.12, 10.3.17
Statute of Limitations
4.6.3, 12.2.6, 13.7
Stopping the Work
2.3, 4.3.6, 9.7, 10.3, 14.1
Stored Materials
6.2.1, 9.3.1, 10.2, 12.1, 10.2.4, 11.4.1.4
Subcontractor, Definition of
5.1.1
SUBCONTRACTORS
Subcontractors. Work by
1.2.2, 3.3.2, 3.12.1, 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, 11.4.7, 11.4.8, 14.1,
14.2.1, 14.3.2
Submittals
1.6, 3.10, 3.11, 3.12, 4.2.7, 5.2.1, 5.2.3, 7.3.6, 9.2,
9.3, 9.8, 9.9.1, 9.10.2, 9.10.3, 11.1.3
Subrogation, Waivers of
6.1.1, 11.4.5, 11.4.7
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,
9.10.4.2, 12.2, 13.7
Substantial Completion, Definition of
9.8.1
Substitution of Subcontractors
5.2.3, 5.2.4
Substitution of Architect
4.1.3
Substitutions of Materials
3.4.2, 3.5.1, 7.3.7
Sub-subcontractor, Definition of
5.1.2
Subsurface Conditions
4.3.4
Successors and Assigns
13.2
Superintendent
3.9, 10.2.6
Supervision and Construction Procedures
1.2.2, 3.3.3, 3.4, 3.12.10, 4.2.2, 4.2.7, 4.3.3, 6.1.3,
6.2.4, 7.1.3, 7.3.6, 8.2, 8.3.1, 9.4.2, 10, 12, 14
Surtly
4.4.7, 5.4.1.2, 9.8.5, 9.10.2, 9.10.3, 14.2.2
Surtly, Consent of
9.10.2, 9.10.3
Surveys
2.2.3
Suspension by the Owner for Convenience
14.4
Suspension of the Work
5.4.2, 14.3
Suspension or Termination of the Contract
4.3.6, 5.4.1.1, 11.4.9, 14
Taxes
3.6, 3.8.2.1, 7.3.6.4
Termination by the Contractor
4.3.10, 14.1
Termination by the Owner for Cause
4.3.10, 5.4.1.1, 14.2
Termination of the Architect
4.1.3
Termination of the Contractor
14.2.2

TERMINATION OR SUSPENSION OF THE
CONTRACT
14
Tests and Inspections
3.1.3, 3.3.3, 4.2.2, 4.2.6, 4.2.9, 9.4.2, 9.8.3, 9.9.2,
9.10.1, 10.3.2, 11.4.1.1, 12.2.1, 13.5
TIME
8
Time, Delays and Extensions of
3.2.3, 4.3.4, 4.3.7, 4.4.5, 5.2.3, 7.2.1, 7.3.1,
7.4.1, 8.3, 9.5.1, 9.7.1, 10.3.2, 10.6.1, 14.3.2
Time Limits
2.1.2, 2.2, 2.4, 3.2.1, 3.7.3, 3.10, 3.11, 3.12.5, 3.15.1,
4.2, 4.3, 4.4, 4.5, 4.6, 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, 11.1.3, 11.4.1.5, 11.4.6, 11.4.10, 12.2, 13.5,
13.7, 14
Time Limits on Claims
4.3.2, 4.3.4, 4.3.8, 4.4.4.5, 4.6
Title to Work
9.3.2, 9.3.3
UNCOVERING AND CORRECTION OF
WORK
12
Uncovering of Work
12.1
Unforeseen Conditions
4.3.4, 8.3.1, 10.3
Unit Prices
4.3.9, 7.3.3.2
Use of Documents
1.1.1, 1.6, 2.2.5, 3.12.6, 5.3
Use of Site
3.13, 6.1.1, 6.2.1
Values, Schedule of
9.2, 9.3.1
Waiver of Claims by the Architect
13.4.2
Waiver of Claims by the Contractor
4.3.10, 9.10.5, 11.4.7, 13.4.2
Waiver of Claims by the Owner
4.3.10, 9.9.3, 9.10.3, 9.10.4, 11.4.3, 11.4.5, 11.4.7,
12.2.2.1, 13.4.2, 14.2.4
Waiver of CONSEQUENTIAL DAMAGES
4.3.10, 14.2.4
Waiver of Liens
9.10.2, 9.10.4
Waivers of Subrogation
6.1.1, 11.4.5, 11.4.7
Warranty
3.5, 4.2.9, 4.3.5.3, 9.3.3, 9.8.4, 9.9.1, 9.10.4, 12.2.2,
13.7.1.3
Weather Delays
4.3.7.2
Work, Definition of
1.1.3
Written Consent

ARTICLE 1  GENERAL PROVISIONS
§ 1.1  BASIC DEFINITIONS
§ 1.1.1  THE CONTRACT DOCUMENTS
The Contract Documents consist of the Agreement between Owner and Contractor (hereinafter the Agreement), Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, Addenda issued prior to execution of the Contract, other documents listed in the Agreement and Modifications issued after execution of the Contract. A Modification is (1) a written amendment to the Contract signed by both parties, (2) a Change Order, (3) a Construction Change Directive or (4) a written order for a minor change in the Work issued by the Architect. Unless specifically enumerated in the Agreement, the Contract Documents do not include other documents such as bidding requirements (advertisement or invitation to bid, Instructions to Bidders, sample forms, the Contractor’s bid or portions of Addenda relating to bidding requirements).

§ 1.1.2  THE CONTRACT
The Contract Documents form the Contract for Construction. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations or agreements, either written or oral. The Contract may be amended or modified only by a Modification. The Contract Documents shall not be construed to create a contractual relationship of any kind (1) between the Architect and Contractor, (2) between the Owner and a Subcontractor or Sub-subcontractor, (3) between the Owner and Architect or (4) between any persons or entities other than the Owner and Contractor. 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 or 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  THE PROJECT MANUAL
The Project Manual is a volume assembled for the Work which may include the bidding requirements, sample forms, Conditions of the Contract and Specifications.

§ 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.

§ 1.2.2  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 which have well-known technical or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings.
§ 1.3 CAPITALIZATION
§ 1.3.1 Terms capitalized in these General Conditions include those which 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
§ 1.4.1 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 EXECUTION OF CONTRACT DOCUMENTS
§ 1.5.1 The Contract Documents shall be signed by the Owner and Contractor. If either the Owner or Contractor or both do not sign all the Contract Documents, the Architect shall identify such unsigned Documents upon request.

§ 1.5.2 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.

§ 1.6 OWNERSHIP AND USE OF DRAWINGS, SPECIFICATIONS AND OTHER INSTRUMENTS OF SERVICE
§ 1.6.1 The Drawings, Specifications and other documents, including those in electronic form, prepared by the Architect and the Architect's consultants are Instruments of Service through which the Work to be executed by the Contractor is described. The Contractor may retain one record set. Neither the Contractor nor any Subcontractor, Sub-subcontractor or material or equipment supplier shall own or claim a copyright in the Drawings, Specifications and other documents prepared by the Architect or the Architect's consultants, and unless otherwise indicated the Architect and the Architect's consultants shall be deemed the authors of them and will retain all common law, statutory and other reserved rights, in addition to the copyrights. All copies of Instruments of Service, except the Contractor's record set, shall be returned or suitably accounted for to the Architect, on request, upon completion of the Work. The Drawings, Specifications and other documents prepared by the Architect and the Architect's consultants, and copies thereof furnished to the Contractor, are for use solely with respect to this Project. They are not to be used by the Contractor or any Subcontractor, Sub-subcontractor or material or equipment supplier on other projects or for additions to this Project outside the scope of the Work without the specific written consent of the Owner, Architect and the Architect's consultants. The Contractor, Subcontractors, Sub-subcontractors and the material or equipment suppliers are authorized to use and reproduce applicable portions of the Drawings, Specifications and other documents prepared by the Architect and the Architect's consultants appropriate to and for use in the execution of their Work under the Contract Documents. All copies made under this authorization shall bear the statutory copyright notice, if any, shown on the Drawings, Specifications and other documents prepared by the Architect and the Architect's consultants. Submittal or distribution to meet official regulatory requirements or for other purposes in connection with this Project is not to be construed as publication in derogation of the Architect's or Architect's consultants' rights or other reserved rights.

ARTICLE 2 OWNER
§ 2.1 GENERAL
§ 2.1.1 The Owner is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The Owner shall designate in writing a representative who shall have express authority to bind the Owner with respect to all matters requiring the Owner's approval or authorization. Except as otherwise provided in Section 4.2.1, the Architect does not have such authority. The term "Owner" means the Owner or the Owner's authorized representative.

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

§ 2.2 INFORMATION AND SERVICES REQUIRED OF THE OWNER
§ 2.2.1 The Owner shall, at the written request of the Contractor, prior to commencement of the Work and thereafter, furnish to the Contractor reasonable evidence that financial arrangements have been made to fulfill the Owner's obligations under the Contract. Furnishing of such evidence shall be a condition precedent to commencement or...
continuation of the Work. After such evidence has been furnished, the Owner shall not materially vary such financial arrangements without prior notice to the Contractor.

§ 2.2.2 Except for permits and fees, including those required under Section 3.7.1, which are the responsibility of the Contractor under the Contract Documents, 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.

§ 2.2.3 The Owner shall furnish surveys describing physical characteristics, legal limitations and utility locations for the site of the Project, and a legal description of the site. The Contractor shall be entitled to rely on the accuracy of information furnished by the Owner but shall exercise proper precautions relating to the safe performance of the Work.

§ 2.2.4 Information or services required of the Owner by the Contract Documents shall be furnished by the Owner with reasonable promptness. Any other information or services relevant to the Contractor’s performance of the Work under the Owner’s control shall be furnished by the Owner after receipt from the Contractor of a written request for such information or services.

§ 2.2.5 Unless otherwise provided in the Contract Documents, the Contractor will be furnished, free of charge, such copies of Drawings and Project Manuals as are reasonably necessary for execution of the Work.

§ 2.3 OWNER’S RIGHT TO STOP THE WORK
§ 2.3.1 If the Contractor fails to correct Work which is not in accordance with the requirements of the Contract Documents as required by Section 12.2 or persistently 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.

§ 2.4 OWNER’S RIGHT TO CARRY OUT THE WORK
§ 2.4.1 If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within a seven-day period after receipt of written notice from the Owner to commence and continue correction of such default or neglect with diligence and promptness, the Owner may after such seven-day period give the Contractor a second written notice to correct such deficiencies within a three-day period. If the Contractor within such three-day period after receipt of such second notice fails to commence and continue to correct any deficiencies, 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 the Contractor the reasonable cost of correcting such deficiencies, including Owner’s expenses and compensation for the Architect’s additional services made necessary by such default, neglect or failure. Such action by the Owner and amounts charged to the Contractor are both subject to prior approval of the Architect. If payments then or thereafter due the Contractor are not sufficient to cover such amounts, the Contractor shall pay the difference to the Owner.

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 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.

§ 3.1.3 The Contractor shall not be relieved of obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the Architect, or by tests, inspections or approvals required or performed by persons other than the Contractor.

§ 3.2 REVIEW OF CONTRACT DOCUMENTS AND FIELD CONDITIONS BY CONTRACTOR
§ 3.2.1 Since the Contract Documents are complementary, before starting each portion of the Work, the Contractor shall carefully study and compare the various Drawings and other Contract Documents relative to that portion of the
Work, as well as the information furnished by the Owner pursuant to Section 2.2.3, shall take field measurements of any existing conditions related to that portion of the Work and shall observe any conditions at the site affecting it. These obligations are for the purpose of facilitating construction by the Contractor and are not for the purpose of discovering errors, omissions, or inconsistencies in the Contract Documents. However, any errors, inconsistencies or omissions discovered by the Contractor shall be reported promptly to the Architect as a request for information in such form as the Architect may require.

§ 3.2.2 Any design errors or omissions noted by the Contractor during this review shall be reported promptly to the Architect, but 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. The Contractor is not required to ascertain that the Contract Documents are in accordance with applicable laws, statutes, ordinances, building codes, and rules and regulations, but any non-conformity discovered by or made known to the Contractor shall be reported promptly to the Architect.

§ 3.2.3 If the Contractor believes that additional cost or time is involved because of clarifications or instructions issued by the Architect in response to the Contractor's notices or requests for information pursuant to Sections 3.2.1 and 3.2.2, the Contractor shall make Claims as provided in Sections 4.3.6 and 4.3.7. If the Contractor fails to perform the obligations of Sections 3.2.1 and 3.2.2, the Contractor shall pay such costs and damages to the Owner as would have been avoided if the Contractor had performed such obligations. The Contractor shall not be liable to the Owner or Architect for damages resulting from errors, inconsistencies or omissions in the Contract Documents or for differences between field measurements or conditions and the Contract Documents unless the Contractor recognized such error, inconsistency, omission or difference and knowingly failed to report it to the Architect.

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

§ 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.

§ 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.

§ 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 The Contractor may make substitutions only with the consent of the Owner, after evaluation by the Architect and in accordance with a Change Order.

§ 3.4.3 The Contractor shall enforce strict discipline and good order among the Contractor's employees and other persons carrying out the Contract. The Contractor shall not permit employment of unfit persons or persons not skilled in tasks assigned to them.
§ 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 otherwise required or permitted by the Contract Documents, that the Work will be free from defects not inherent in the quality required or permitted, and that the Work will conform to the requirements of the Contract Documents. Work not conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective. The Contractor’s warranty excludes remedy for damage or defect caused by abuse, modifications 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.

§ 3.6 TAXES
§ 3.6.1 The Contractor shall pay sales, consumer, use and similar taxes for the Work provided by the Contractor which are legally enacted when bids are received or negotiations concluded, whether or not yet effective or merely scheduled to go into effect.

§ 3.7 PERMITS, FEES AND NOTICES
§ 3.7.1 Unless otherwise provided in the Contract Documents, the Contractor shall secure and pay for the building permit and other permits and governmental fees, licenses and inspections necessary for proper execution and completion of the Work which are customarily secured after execution of the Contract and which are legally required when bids are received or negotiations concluded.

§ 3.7.2 The Contractor shall comply with and give notices required by laws, ordinances, rules, regulations and lawful orders of public authorities applicable to performance of the Work.

§ 3.7.3 It is not the Contractor’s responsibility to ascertain that the Contract Documents are in accordance with applicable laws, statutes, ordinances, building codes, and rules and regulations. However, if the Contractor observes that portions of the Contract Documents are at variance therewith, the Contractor shall promptly notify the Architect and Owner in writing, and necessary changes shall be accomplished by appropriate Modification.

§ 3.7.4 If the Contractor performs Work knowing it to be contrary to laws, statutes, ordinances, building codes, and rules and regulations without such notice to the Architect and Owner, the Contractor shall assume appropriate responsibility for such Work and shall bear the costs attributable to correction.

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

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

§ 3.8.3 Materials and equipment under an allowance shall be selected by the Owner in sufficient time to avoid delay in the Work.

§ 3.9 SUPERINTENDENT
§ 3.9.1 The Contractor shall employ a competent superintendent and necessary assistants who shall be in attendance at the Project site during performance of the Work. The superintendent shall represent the Contractor, and communications given to the superintendent shall be as binding as if given to the Contractor.

---


This document was produced by AIA software at 11:13/06 on 12/19/2006 under Order No: 1000347229_1 which expires on 4/13/2009, and is not for resale.

User Notes:
§ 3.10 CONTRACTOR'S CONSTRUCTION SCHEDULES
§ 3.10.1 The Contractor, promptly after being awarded the Contract, shall prepare and submit for the Owner's and Architect's information a Contractor's construction schedule for the Work. The schedule shall not exceed time limits current under the Contract Documents, shall be revised at appropriate intervals as required by the conditions of the Work and Project, shall be related to the entire Project to the extent required by the Contract Documents, and shall provide for expeditious and practicable execution of the Work.

§ 3.10.2 The Contractor shall prepare and keep current, for the Architect's approval, a schedule of submittals which is coordinated with the Contractor's construction schedule and allows the Architect reasonable time to review submittals.

§ 3.10.3 The Contractor shall perform the Work in general accordance with the most recent schedules submitted to the Owner and Architect.

§ 3.11 DOCUMENTS AND SAMPLES AT THE SITE
§ 3.11.1 The Contractor shall maintain at the site for the Owner one record copy of the Drawings, Specifications, Addenda, Change Orders and other Modifications, in good order and marked correctly, to record field changes and selections made during construction, and one record copy of approved Shop Drawings, Product Data, Samples and similar required submittals. These shall be available to the Architect and shall be delivered to the Architect for submittal to the Owner upon completion of the Work.

§ 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 which 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. The purpose of their submittal is to demonstrate for those portions of the Work for which submittals are required by the Contract Documents the way by which the Contractor proposes to conform to the information given and the design concept expressed in the Contract Documents. 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 which 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 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. Submittals which are not marked as reviewed for compliance with the Contract Documents and approved by the Contractor may be returned by the Architect without action.

§ 3.12.6 By approving and submitting Shop Drawings, Product Data, Samples and similar submittals, the Contractor represents that the Contractor has determined and verified materials, field measurements and field construction criteria related thereto, or will do so, and has 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 requirements of the Contract Documents by the Architect's approval of Shop Drawings, Product Data, Samples or similar submittals unless the Contractor has specifically informed the Architect in writing of such deviation at the time of submittal and (1) the Architect has given written approval to the specific deviation as a minor change in the Work, or (2) a Change Order or Construction Change Directive has been issued authorizing the deviation. The Contractor shall not be relieved of responsibility for errors or omissions in Shop Drawings, Product Data, Samples or similar submittals by the Architect's approval thereof.

§ 3.12.9 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 written notice the Architect's approval of a resubmission shall not apply to such revisions.

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

§ 3.13 USE OF SITE
§ 3.13.1 The Contractor shall confine operations at the site to areas permitted by law, ordinances, permits and the Contract Documents and shall not unreasonably encumber the site with materials or equipment.

§ 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.

§ 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 such construction by the Owner or a separate contractor except with written consent of the Owner and of such separate contractor; such consent shall not be unreasonably withheld. The Contractor shall not unreasonably withhold from the Owner or a separate contractor the Contractor's consent to cutting or otherwise altering the Work.

§ 3.15 CLEANING UP
§ 3.15.1 The Contractor shall keep the premises and surrounding area free from accumulation of waste materials or rubbish caused by operations under the Contract. At completion of the Work, the Contractor shall remove from and about the Project waste materials, rubbish, the Contractor's tools, construction equipment, machinery and surplus materials.

§ 3.15.2 If the Contractor fails to clean up as provided in the Contract Documents, the Owner may do so and the cost thereof shall be charged to the Contractor.
§ 3.16 ACCESS TO WORK
§ 3.16.1 The Contractor shall provide the Owner and Architect access to the Work in preparation and progress wherever located.

§ 3.17 ROYALTIES, PATENTS AND COPYRIGHTS
§ 3.17.1 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 such defense or loss when a particular design, process or product of a particular manufacturer or manufacturers is required by the Contract Documents or where the copyright violations are contained in Drawings, Specifications or other documents prepared by the Owner or Architect. However, if the Contractor has reason to believe that the required design, process or product is an infringement of a copyright or a patent, the Contractor shall be responsible for such loss unless such information is promptly furnished to the Architect.

§ 3.18 INDEMNIFICATION
§ 3.18.1 To the fullest extent permitted by law and to the extent claims, damages, losses or expenses are not covered by Project Management Protective Liability insurance purchased by the Contractor in accordance with Section 11.3, the Contractor shall indemnify and hold harmless the Owner, 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, provided that such claim, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury or to destruction of tangible property (other than the Work itself), but only to the extent caused by the negligent acts or omissions of the Contractor, a Subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss or expense is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity which would otherwise exist as to a party or person described in this Section 3.18.

§ 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.

ARTICLE 4 ADMINISTRATION OF THE CONTRACT
§ 4.1 ARCHITECT
§ 4.1.1 The Architect is the person lawfully licensed to practice architecture or an entity lawfully practicing architecture identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The term "Architect" means the Architect or the Architect’s authorized representative.

§ 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 If the employment of the Architect is terminated, the Owner shall employ a new Architect against whom the Contractor has no reasonable objection and whose status under the Contract Documents shall be that of the former Architect.

§ 4.2 ARCHITECT’S ADMINISTRATION OF THE CONTRACT
§ 4.2.1 The Architect will provide administration of the Contract as described in the Contract Documents, and will be an Owner’s representative (1) during construction, (2) until final payment is due and (3) with the Owner’s concurrence, from time to time during the one-year period for correction of Work described in Section 12.2. The Architect will have authority to act on behalf of the Owner only to the extent provided in the Contract Documents, unless otherwise modified in writing in accordance with other provisions of the Contract.

§ 4.2.2 The Architect, as a representative of the Owner, will visit the site at intervals appropriate to the stage of the Contractor’s operations (1) to become generally familiar with and to keep the Owner informed about the progress and quality of the portion of the Work completed, (2) to endeavor to guard the Owner against defects and
deficiencies in the Work, and (3) to determine in general if the Work 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 never have control over or charge of, nor be responsible 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, except as provided in
Section 3.3.1.

§ 4.2.3 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 Facilitating Contract Administration. Except as otherwise provided in the Contract
Documents or when direct communications have been specially authorized, the Owner and Contractor shall
effort to communicate with each other through the architect 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 material suppliers shall be through the Contractor. Communications by and with
separate contractors shall be through the Owner.

§ 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 will have 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 13.5.2 and 13.5.3, whether or not such 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, material and equipment 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
with such reasonable promptness as to cause no delay in the Work or in the activities of the Owner, Contractor or
separate contractors, 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, unless
otherwise specifically stated by the Architect, of any construction means, methods, techniques, sequences or
procedures. The Architect’s approval of a specific item shall not indicate approval of an assembly of which the item
is a component.

§ 4.2.8 The Architect will prepare Change Orders and Construction Change Directives, and may authorize minor
changes in the Work as provided in Section 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, will 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 and will issue a final Certificate
for Payment upon compliance with the requirements of the Contract Documents.

§ 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 duties, responsibilities and limitations of authority of
such project representatives shall be as set forth in an exhibit to be incorporated in the Contract Documents.
§ 4.2.11 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. If no agreement is made concerning the time within which interpretations required of the Architect shall be furnished in compliance with this Section 4.2, then delay shall not be recognized on account of failure by the Architect to furnish such interpretations until 15 days after written request is made for them.

§ 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 initial 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 so rendered in good faith.

§ 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.

§ 4.3 CLAIMS AND DISPUTES
§ 4.3.1 Definition. A Claim is a demand or assertion by one of the parties seeking, as a matter of right, adjustment or interpretation of Contract terms, payment of money, extension of time or other relief with respect to the terms of the Contract. The term “Claim” also includes other disputes and matters in question between the Owner and Contractor arising out of or relating to the Contract. Claims must be initiated by written notice. The responsibility to substantiate Claims shall rest with the party making the Claim.

§ 4.3.2 Time Limits on Claims. Claims by either party must be initiated within 21 days after occurrence of the event giving rise to such Claim or within 21 days after the claimant first recognizes the condition giving rise to the Claim, whichever is later. Claims must be initiated by written notice to the Architect and the other party.

§ 4.3.3 Continuing Contract Performance. Pending final resolution of a Claim except as otherwise agreed in writing or as provided in Section 9.7.1 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.

§ 4.3.4 Claims for Concealed or Unknown Conditions. If conditions are encountered at the site which are (1) subsurface or otherwise concealed physical conditions which differ materially from those indicated in the Contract Documents or (2) unknown physical conditions of an unusual nature, which 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, then notice by the observing party shall be given to the other party promptly before conditions are disturbed and in no event later than 21 days after first observance of the conditions. The Architect will promptly investigate such conditions and, if they differ materially and cause an increase or decrease in the Contractor’s cost of, or time required for, performance of any part of the Work, will recommend an equitable adjustment in the Contract Sum or Contract Time, or both. If the Architect 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 so notify the Owner and Contractor in writing, stating the reasons. Claims by either party in opposition to such determination must be made within 21 days after the Architect has given notice of the decision. If the conditions encountered are materially different, the Contract Sum and Contract Time shall be equitably adjusted, but if the Owner and Contractor cannot agree on an adjustment in the Contract Sum or Contract Time, the adjustment shall be referred to the Architect for initial determination, subject to further proceedings pursuant to Section 4.4.

§ 4.3.5 Claims for Additional Cost. If the Contractor wishes to make a Claim for an increase in the Contract Sum, written notice as provided herein shall be given before proceeding to execute the Work. Prior notice is not required for Claims relating to an emergency endangering life or property arising under Section 10.6.

§ 4.3.6 If the Contractor believes additional cost is involved for reasons including but not limited to (1) a written interpretation from the Architect, (2) an order by the Owner to stop the Work where the Contractor was not at fault, (3) a written order for a minor change in the Work issued by the Architect, (4) failure of payment by the Owner, (5) termination of the Contract by the Owner, (6) Owner’s suspension or (7) other reasonable grounds, Claim shall be filed in accordance with this Section 4.3.
§ 4.3.7 Claims for Additional Time
§ 4.3.7.1 If the Contractor wishes to make Claim for an increase in the Contract Time, written notice as provided herein shall be given. The Contractor’s Claim shall include an estimate of cost and of probable effect of delay on progress of the Work. In the case of a continuing delay only one Claim is necessary.

§ 4.3.7.2 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.

§ 4.3.8 Injury or Damage to Person or Property. If either party to the Contract suffers injury or damage to person or property because of an act or omission of the other party, or of others for whose acts such party is legally responsible, written notice of such injury or damage, whether or not insured, shall be given to the other party within a reasonable time not exceeding 21 days after discovery. The notice shall provide sufficient detail to enable the other party to investigate the matter.

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

§ 4.3.10 Claims for Consequential Damages. The Contractor and Owner waive Claims against each other for consequential damages arising out of or relating to this Contract. This mutual waiver includes:

1. damages incurred by the Owner for rental expenses, for losses of use, income, profit, financing, business and reputation, and for loss of management or employee productivity or of the services of such persons; and

2. damages incurred by the Contractor for principal office expenses including the compensation of personnel stationed there, for losses of financing, business and reputation, and for loss of profit except anticipated profit arising directly from the Work.

This mutual waiver is applicable, without limitation, to all consequential damages due to either party’s termination in accordance with Article 14. Nothing contained in this Section 4.3.10 shall be deemed to preclude an award of liquidated direct damages, when applicable, in accordance with the requirements of the Contract Documents.

§ 4.4 RESOLUTION OF CLAIMS AND DISPUTES
§ 4.4.1 Decision of Architect. Claims, including those alleging an error or omission by the Architect but excluding those arising under Sections 10.3 through 10.5, shall be referred initially to the Architect for decision. An initial decision by the Architect shall be made as a condition precedent to mediation, arbitration or litigation of all Claims between the Contractor and Owner arising prior to the date final payment is due, unless 30 days have passed after the Claim has been referred to the Architect with no decision having been rendered by the Architect. The Architect will not decide disputes between the Contractor and persons or entities other than the Owner.

§ 4.4.2 The Architect will review Claims and within ten days of the receipt of the Claim take one or more of the following actions: (1) request additional supporting data from the claimant or a response with supporting data from the other party, (2) reject the Claim in whole or in part, (3) approve the Claim, (4) suggest a compromise, or (5) advise the parties that the Architect is unable to resolve the Claim if the Architect lacks sufficient information to evaluate the merits of the Claim or if the Architect concludes that, in the Architect’s sole discretion, it would be inappropriate for the Architect to resolve the Claim.

§ 4.4.3 In evaluating Claims, the Architect 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 Architect in rendering a decision. The Architect may request the Owner to authorize retention of such persons at the Owner’s expense.

§ 4.4.4 If the Architect requests a party to provide a response to a Claim or to furnish additional supporting data, such party shall respond, within ten days after receipt of such request, and shall either provide a response on the requested supporting data, advise the Architect when the response or supporting data will be furnished or advise the Architect that no supporting data will be furnished. Upon receipt of the response or supporting data, if any, the Architect shall either reject or approve the Claim in whole or in part.
§ 4.4.5 The Architect will approve or reject Claims by written decision, which shall state the reasons therefor and which shall notify the parties of any change in the Contract Sum or Contract Time or both. The approval or rejection of a Claim by the Architect shall be final and binding on the parties but subject to mediation and arbitration.

§ 4.4.6 When a written decision of the Architect states that (1) the decision is final but subject to mediation and arbitration and (2) a demand for arbitration of a Claim covered by such decision must be made within 30 days after the date on which the party making the demand receives the final written decision, then failure to demand arbitration within said 30 days’ period shall result in the Architect’s decision becoming final and binding upon the Owner and Contractor. If the Architect renders a decision after arbitration proceedings have been initiated, such decision may be entered as evidence, but shall not supersede arbitration proceedings unless the decision is acceptable to all parties concerned.

§ 4.4.7 Upon receipt of a Claim against the Contractor or at any time thereafter, the Architect or the Owner may, but is not obligated to, notify the surety, if any, of the nature and amount of the Claim. If the Claim relates to a possibility of a Contractor’s default, the Architect or the Owner may, but is not obligated to, notify the surety and request the surety’s assistance in resolving the controversy.

§ 4.4.8 If a Claim relates to or is the subject of a mechanic’s lien, the party asserting such Claim may proceed in accordance with applicable law to comply with the lien notice or filing deadlines prior to resolution of the Claim by the Architect, by mediation or by arbitration.

§ 4.5 MEDIATION
§ 4.5.1 Any Claim arising out of or related to the Contract, except Claims relating to aesthetic effect and except those waived as provided for in Sections 4.3.10, 9.10.4 and 9.10.5 shall, after initial decision by the Architect or 30 days after submission of the Claim to the Architect, be subject to mediation as a condition precedent to arbitration or the institution of legal or equitable proceedings by either party.

§ 4.5.2 The parties shall endeavor to resolve their Claims by mediation which, unless the parties mutually agree otherwise, shall be in accordance with the Construction Industry Mediation Rules of the American Arbitration Association currently in effect. Request for mediation shall be filed in writing with the other party to the Contract and with the American Arbitration Association. The request may be made concurrently with the filing of a demand for arbitration but, in such event, mediation shall proceed in advance of arbitration or legal or equitable proceedings, which shall be stayed pending mediation for a period of 60 days from the date of filing, unless stayed for a longer period by agreement of the parties or court order.

§ 4.5.3 The parties shall share the mediator’s fee and any filing fees equally. The mediation shall be held in the place where the Project is located, unless another location is mutually agreed upon. Agreements reached in mediation shall be enforceable as settlement agreements in any court having jurisdiction thereof.

§ 4.6 ARBITRATION
§ 4.6.1 Any Claim arising out of or related to the Contract, except Claims relating to aesthetic effect and except those waived as provided for in Sections 4.3.10, 9.10.4 and 9.10.5, shall, after decision by the Architect or 30 days after submission of the Claim to the Architect, be subject to arbitration. Prior to arbitration, the parties shall endeavor to resolve disputes by mediation in accordance with the provisions of Section 4.5.

§ 4.6.2 Claims not resolved by mediation shall be decided by arbitration which, unless the parties mutually agree otherwise, shall be in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association currently in effect. The demand for arbitration shall be filed in writing with the other party to the Contract and with the American Arbitration Association, and a copy shall be filed with the Architect.

§ 4.6.3 A demand for arbitration shall be made within the time limits specified in Sections 4.4.6 and 4.6.1 as applicable, and in other cases within a reasonable time after the Claim has arisen, and in no event shall it be made after the date when institution of legal or equitable proceedings based on such Claim would be barred by the applicable statute of limitations as determined pursuant to Section 13.7.
§ 4.6.4 Limitation on Consolidation or Joinder. No arbitration arising out of or relating to the Contract shall include, by consolidation or joinder or in any other manner, the Architect, the Architect’s employees or consultants, except by written consent containing specific reference to the Agreement and signed by the Architect, Owner, Contractor and any other person or entity sought to be joined. No arbitration shall include, by consolidation or joinder or in any other manner, parties other than the Owner, Contractor, a separate contractor as described in Article 6 and other persons substantially involved in a common question of fact or law whose presence is required if complete relief is to be accorded in arbitration. No person or entity other than the Owner, Contractor or a separate contractor as described in Article 6 shall be included as an original third party or additional third party to an arbitration whose interest or responsibility is insubstantial. Consent to arbitration involving an additional person or entity shall not constitute consent to arbitration of a Claim not described therein or with a person or entity not named or described therein. The foregoing agreement to arbitrate and other agreements to arbitrate with an additional person or entity duly consented to by parties to the Agreement shall be specifically enforceable under applicable law in any court having jurisdiction thereof.

§ 4.6.5 Claims and Timely Assertion of Claims. The party filing a notice of demand for arbitration must assert in the demand all Claims then known to that party on which arbitration is permitted to be demanded.

§ 4.6.6 Judgment on Final Award. The award rendered by the arbitrator or arbitrators shall be final, and judgment may be entered upon it in accordance with applicable law in any court having jurisdiction thereof.

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 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 Unless otherwise stated in the Contract Documents or the bidding requirements, the Contractor, as soon as practicable after award of the Contract, shall furnish in writing to the Owner through the Architect the names 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. The Architect will promptly reply to the Contractor in writing stating whether or not the Owner or the Architect, after due investigation, has reasonable objection to any such proposed person or entity. Failure of the Owner or Architect to reply promptly shall constitute notice of no reasonable objection.

§ 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. If the proposed but rejected Subcontractor was reasonably capable of performing the Work, the Contract Sum and Contract Time shall be increased or decreased by the difference, if any, occasioned by such change, and an appropriate Change Order shall be issued before commencement of the substitute Subcontractor’s Work. However, no increase in the Contract Sum or Contract Time shall be allowed for such change unless the Contractor has acted promptly and reasonably in submitting names as required.

§ 5.2.4 The Contractor shall not change a Subcontractor, person or entity previously selected if the Owner or Architect makes reasonable objection to such substitute.
§ 5.3 SUBCONTRACTUAL RELATIONS
§ 5.3.1 By appropriate agreement, written where legally required for validity, the Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor by terms of the Contract Documents, to assume toward the Contractor all the obligations and responsibilities, including the responsibility for safety of the Subcontractor’s Work, which the Contractor, by these 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 which 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.

§ 5.4 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 which the Owner accepts by notifying the Subcontractor and Contractor in writing; and

2. assignment is subject to the prior rights of the surety, if any, obligated under bond relating to the Contract.

§ 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.

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 Owner reserves the right to perform construction or operations related to the Project with the Owner’s own forces, and to award separate contracts in connection with other portions of the Project or other construction or operations on the site under Conditions of the Contract identical or substantially similar to these including those portions related to insurance and waiver of subrogation. If the Contractor claims that delay or additional cost is involved because of such action by the Owner, the Contractor shall make such Claim as provided in Section 4.3.

§ 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 The Owner shall provide for coordination of the activities of the Owner’s own forces and of each separate contractor with the Work of the Contractor, who shall cooperate with them. The Contractor shall participate with other separate contractors and the Owner in reviewing their construction schedules when directed to do so. The Contractor shall make any revisions to the construction schedule deemed necessary after a joint review and mutual agreement. The construction schedules shall then constitute the schedules to be used by the Contractor, separate contractors and the Owner until subsequently revised.

§ 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, the Owner shall be deemed to be subject to the same obligations and to have the same rights which apply to the Contractor under the Conditions of the Contract, including, without excluding others, those stated in Article 3, this Article 6 and Articles 10, 11 and 12.

§ 6.2 MUTUAL RESPONSIBILITY
§ 6.2.1 The Contractor shall afford the Owner 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 report to the Architect apparent discrepancies or defects in such other construction that would render it unsuitable for such proper execution and results. Failure of the Contractor so to report shall constitute an acknowledgment that the Owner’s or separate contractor’s completed or partially completed construction is fit and proper to receive the Contractor’s Work, except as to defects not then reasonably discoverable.

§ 6.2.3 The Owner shall be reimbursed by the Contractor for costs incurred by the Owner which are payable to a separate contractor because of delays, improperly timed activities or defective construction of the Contractor. The Owner shall be responsible to the Contractor for costs incurred by the Contractor because of delays, improperly timed activities, damage to the Work or defective construction of a separate 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 as provided in Section 10.2.5.

§ 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.

§ 6.3 OWNER’S RIGHT TO CLEAN UP
§ 6.3.1 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, and the Contractor shall proceed promptly, unless otherwise provided in the Change Order, Construction Change Directive or order for a minor change in the Work.

§ 7.2 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 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 Methods used in determining adjustments to the Contract Sum may include those listed in Section 7.3.3.

§ 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 7.3.6.

§ 7.3.4 Upon receipt of a Construction Change Directive, the Contractor shall promptly proceed with the change in the Work involved and advise the Architect of the Contractor's agreement or disagreement with the method, if any, provided in the Construction Change Directive for determining the proposed adjustment in the Contract Sum or Contract Time.

§ 7.3.5 A Construction Change Directive signed by the Contractor indicates the agreement of the Contractor 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.

§ 7.3.6 If the Contractor does not respond promptly or disagrees with the method for adjustment in the Contract Sum, the method and the adjustment shall be determined by the Architect 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, a reasonable allowance for overhead and profit. In such case, and also under Section 7.3.3, the Contractor shall keep and present, in such form as 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 7.3.6 shall be limited to the following:

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

§ 7.3.7 The amount of credit to be allowed by the Contractor to the Owner for a deletion or change which results in a net decrease in the Contract Sum shall be actual net cost as certified 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.

§ 7.3.8 Pending final determination of the total cost of a Construction Change Directive to the Owner, amounts not in dispute for such changes in the Work shall be included in Applications for Payment accompanied by a Change Order indicating the parties' agreement with part or all of such costs. For any portion of such cost that remains in dispute, the Architect will make an interim determination for purposes of monthly certification for payment for those costs. That determination of cost shall adjust the Contract Sum on the same basis as a Change Order, subject to the right of either party to disagree and assert a claim in accordance with Article 4.

§ 7.3.9 When the Owner and Contractor agree with the determination made by 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 shall be recorded by preparation and execution of an appropriate Change Order.

§ 7.4 MINOR CHANGES IN THE WORK

§ 7.4.1 The Architect will have authority to order minor changes in the Work not involving adjustment in the Contract Sum or extension of the Contract Time and not inconsistent with the intent of the Contract Documents. Such changes shall be effected by written order and shall be binding on the Owner and Contractor. The Contractor shall carry out such written orders promptly.
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 knowingly, except by agreement or instruction of the Owner in writing, prematurely commence operations on the site or elsewhere prior to the effective date of insurance required by Article 11 to be furnished by the Contractor and Owner. The date of commencement of the Work shall not be changed by the effective date of such insurance. Unless the date of commencement is established by the Contract Documents or a notice to proceed given by the Owner, the Contractor shall notify the Owner in writing not less than five days or other agreed period before commencing the Work to permit the timely filing of mortgages, mechanic’s liens and other security interests.

§ 8.2.3 The Contractor shall proceed expeditiously with adequate 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 an act or neglect of the Owner or Architect, or of an employee of either, or of a separate contractor employed by the Owner, or by changes ordered in the Work, or by labor disputes, fire, unusual delay in deliveries, unavoidable casualties or other causes beyond the Contractor’s control, or by delay authorized by the Owner pending mediation and arbitration, or by other causes which the Architect determines may justify delay, then the Contract Time shall be extended by Change Order 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 Section 4.3.

§ 8.3.3 This Section 8.3 does not preclude recovery of damages for delay by either party under other provisions of the Contract Documents.

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.

§ 9.2 SCHEDULE OF VALUES
§ 9.2.1 Before the first Application for Payment, the Contractor shall submit to the Architect a schedule of values allocated to various portions of the Work, prepared in such form and supported by such data to substantiate its accuracy as the Architect may require. This schedule, unless objected to by the Architect, shall be used as a basis for reviewing the Contractor’s Applications for Payment.

§ 9.3 APPLICATIONS FOR PAYMENT
§ 9.3.1 At least ten days before the date established for each progress payment, the Contractor shall submit to the Architect an itemized Application for Payment for operations completed in accordance with the schedule of values. Such application shall be notarized, if required, and supported by such data substantiating the Contractor’s right to
payment as the Owner or Architect may require, such as copies of requisitions from Subcontractors and material suppliers, and reflecting retainage if provided for in the Contract Documents.

§ 9.3.1.1 As provided in Section 7.3.8, such applications may include requests for payment on account of changes in the Work which 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 Such applications may not include requests for payment for portions of the Work for which the Contractor does not intend to pay to a Subcontractor or material supplier, unless such Work has been performed by others whom the Contractor intends to pay.

§ 9.3.2 Unless otherwise provided in the Contract Documents, payments shall be made on account of materials and equipment delivered and suitably stored at the site for subsequent incorporation in the Work. If approved in advance by the Owner, payment may similarly be made for materials and equipment suitably stored off the site at a location agreed upon in writing. Payment for materials and equipment stored on or off the site shall be conditioned upon compliance by the Contractor with procedures satisfactory to the Owner to establish the Owner’s title to such materials and equipment or otherwise protect the Owner’s interest, and shall include the costs of applicable insurance, storage and transportation to the site for such materials and equipment stored off the site.

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

§ 9.4 CERTIFICATES FOR PAYMENT

§ 9.4.1 The Architect will, within seven days after receipt of the Contractor’s Application for Payment, either issue to the Owner a Certificate for Payment, with a copy to the Contractor, for such amount as the Architect determines is properly due, or notify the Contractor and Owner in writing of the Architect’s reasons for withholding certification in whole or in part 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 comprising the Application for Payment, that the Work has progressed to the point indicated and that, to the best of the Architect’s knowledge, information and belief, the quality of the Work is in accordance with the Contract Documents. 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. The issuance of a Certificate for Payment will further constitute a representation that the Contractor is entitled to payment in the amount certified. 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 material suppliers and other data requested by the Owner to substantiate the Contractor’s right to payment, or (4) made examination to ascertain how or for what purpose the Contractor has used money previously paid on account of the Contract Sum.

§ 9.5 DECISIONS TO WITHHOLD CERTIFICATION

§ 9.5.1 The 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;

Init.

AIA Document A201™—1997. Copyright © 1911, 1915, 1918, 1925, 1937, 1951, 1958, 1963, 1966, 1970, 1976, 1987 and 1997 by The American Institute of Architects. All rights reserved. WARNING: This AIA® Document is protected by U.S. Copyright Law and International Treaties. Unauthorized reproduction or distribution of this AIA® Document, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under the law. This document was produced by AIA software at 11:13:06 on 12/18/2006 under Order No.100547728 which expires on 4/13/2009, and is not for resale.

User Notes:

(56680750)
.2 third party claims filed or reasonable evidence indicating probable filing of such claims unless security acceptable to the Owner is provided by the Contractor;
.3 failure of the Contractor to make payments properly to Subcontractors or for labor, materials or equipment;
.4 reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum;
.5 damage to the Owner or another contractor;
.6 reasonable evidence that the Work will not be completed within the Contract Time, and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay; or
.7 persistent failure to carry out the Work in accordance with the Contract Documents.

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

§ 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 promptly pay each Subcontractor, upon receipt of payment from the Owner, out of the amount paid to the Contractor on account of such Subcontractor's portion of the Work, the amount to which said Subcontractor is entitled, reflecting percentages actually retained from payments to the Contractor on account of such Subcontractor's portion of the Work. The Contractor shall, by appropriate agreement with each Subcontractor, require each Subcontractor to make payments to Sub-subcontractors in a similar manner.

§ 9.6.3 The 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 Neither the Owner nor Architect shall have an obligation to pay or to see to the payment of money to a Subcontractor except as may otherwise be required by law.

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

§ 9.7 FAILURE OF PAYMENT
§ 9.7.1 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 arbitration, then the Contractor may, upon seven additional days' written 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 shut-down, delay and start-up, plus interest as provided for in the Contract Documents.
§ 9.8 SUBSTANTIAL COMPLETION

§ 9.8.1 Substantial Completion is the stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work for its intended use.

§ 9.8.2 When the Contractor considers that the Work, or a portion thereof, which the Owner agrees to accept separately, is substantially complete, the Contractor shall prepare and submit to the Architect a comprehensive list of items to be completed or corrected prior to final payment. 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, the Architect will make an inspection to determine whether the Work or designated portion thereof is substantially complete. If the Architect's inspection discloses any item, whether or not included on the Contractor's list, which is not sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work or designated portion thereof for its intended use, the Contractor shall, before issuance of the Certificate of Substantial Completion, complete or correct such item upon notification by the Architect. In such case, the Contractor shall then submit a request for another inspection by the Architect to determine Substantial Completion.

§ 9.8.4 When the Work or designated portion thereof is substantially complete, the Architect will prepare a Certificate of Substantial Completion which shall establish the date of Substantial Completion, shall establish responsibilities of the Owner and Contractor for security, maintenance, heat, utilities, damage to the Work and insurance, and shall fix the time within which the Contractor shall finish all items on the 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.

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

§ 9.9 PARTIAL OCCUPANCY OR USE

§ 9.9.1 The Owner may occupy or use any completed or partially completed portion of the Work at any stage when such portion is designated by separate agreement with the Contractor, provided such occupancy or use is consented to by the insurer as required under Section 11.4.1.5 and authorized by public authorities having jurisdiction over the Work. Such partial occupancy or use may commence whether or not the portion is substantially complete, provided the Owner and Contractor have accepted in writing the responsibilities assigned to each of them for payments, retainage, if any, security, maintenance, heat, utilities, damage to the Work and insurance, and have agreed in writing concerning the period for correction of the Work and commencement of warranties required by the Contract Documents. When the Contractor considers a portion substantially complete, the Contractor 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.

§ 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 written 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, and, 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 terms and conditions of the Contract Documents and that the entire balance found to be due the Contractor and noted in
the final Certificate is due and payable. The 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.

§ 9.10.2 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 and will not be canceled or allowed to expire until at least 30 days’ prior written notice has been given to the Owner, (3) a written statement that the Contractor knows of no substantial reason that the insurance will not be renewable to cover the period required by the Contract Documents, (4) consent of surety, if any, to final payment and (5), if required by the Owner, other data establishing payment or satisfaction of obligations, such as receipts, releases and waivers of liens, claims, security interests or encumbrances arising out of the Contract, to the extent and in such form as may be designated by the Owner. If a Subcontractor refuses to furnish a release or waiver required by the Owner, the Contractor may furnish a bond satisfactory to the Owner to indemnify the Owner against such lien. If such lien remains unsatisfied after payments are made, the Contractor shall refund to the Owner all money that the Owner may be compelled to pay in discharging such lien, including all costs and 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 and accepted. If the remaining balance for Work not fully completed or corrected is less than retainage stipulated in the Contract Documents, and if bonds have been furnished, the written consent of surety to payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by the Contractor to the Architect prior to certification of such payment. Such payment shall be made under terms and conditions governing final payment, except that it shall not constitute a waiver of claims.

§ 9.10.4 The making of final payment shall constitute a waiver of Claims by the Owner except those arising from:
   .1 liens, Claims, security interests or encumbrances arising out of the Contract and unsettled;
   .2 failure of the Work to comply with the requirements of the Contract Documents; or
   .3 terms of special warranties required by the Contract Documents.

§ 9.10.5 Acceptance of final payment by the Contractor, a Subcontractor or material 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
§ 10.1.1 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 and other persons who may be affected thereby;
   .2 the Work and materials and equipment to be incorporated therein, whether in storage on or off the site, under care, custody or control of the Contractor or the Contractor’s Subcontractors or Sub-subcontractors; and
   .3 other property at the site or adjacent thereto, such as trees, shrubs, lawns, walls, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.

§ 10.2.2 The Contractor shall give notices and comply with applicable laws, ordinances, rules, regulations and lawful orders of public authorities bearing on safety of persons or property or their protection from damage, injury or loss.
§ 10.2.3 The Contractor shall erect and maintain, as required by existing conditions and performance of the Contract, reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards, promulgating safety regulations and notifying owners and users of adjacent sites and utilities.

§ 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, except damage or loss 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 load or permit any part of the construction or site to be loaded so as to endanger its safety.

§ 10.3 HAZARDOUS MATERIALS

§ 10.3.1 If reasonable precautions will be inadequate to prevent foreseeable bodily injury or death to persons resulting from a material or substance, including but not limited to asbestos or polychlorinated biphenyl (PCB), encountered on the site by the Contractor, the Contractor shall, upon realizing the condition, immediately stop Work in the affected area and report the condition to the Owner and Architect in writing.

§ 10.3.2 The Owner shall obtain the services of a licensed laboratory to verify the presence or absence of the material or substance reported by the Contractor and, in the event such material or substance is found to be present, to verify that it has been rendered harmless. Unless otherwise required by the Contract Documents, the Owner shall furnish in writing to the Contractor and Architect the names and qualifications of persons or entities who are to perform tests verifying the presence or absence of such material or substance or who are to perform the task of removal or safe containment of such material or substance. The Contractor and the Architect will promptly reply to the Owner in writing stating whether or not either has reasonable objection to the persons or entities proposed by the Owner. If either the Contractor or Architect has an objection to a person or entity proposed by the Owner, the Owner shall propose another to whom the Contractor and the Architect have no reasonable objection. When material or substance has been rendered harmless, Work in the affected area shall resume upon written agreement of the Owner and Contractor. The Contract Time shall be extended appropriately and the Contract Sum shall be increased in the amount of the Contractor’s reasonable additional costs of shut-down, delay and start-up, which adjustments shall be accomplished as provided in Article 7.

§ 10.3.3 To the fullest extent permitted by law, the Owner shall indemnify and hold harmless the Contractor, Subcontractors, 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) and provided that such damage, loss or expense is not due to the sole negligence of a party seeking indemnity.

§ 10.4 The Owner shall not be responsible under Section 10.3 for materials or substances brought to the site by the Contractor unless such materials or substances were required by the Contract Documents.
§ 10.5 If, without negligence on the part of the Contractor, the Contractor is held liable for the cost of remediation of a hazardous material or substance solely by reason of performing Work as required by the Contract Documents, the Owner shall indemnify the Contractor for all cost and expense thereby incurred.

§ 10.6 EMERGENCIES
§ 10.6.1 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 Section 4.3 and Article 7.

ARTICLE 11 INSURANCE AND BONDS
§ 11.1 CONTRACTOR’S LIABILITY INSURANCE
§ 11.1.1 The Contractor shall purchase from and maintain in a company or companies lawfully authorized to do business in the jurisdiction in which the Project is located such insurance as will protect the Contractor from claims set forth below which may arise out of or result from the Contractor’s operations under the Contract and for which the Contractor may be legally liable, whether such operations be by the Contractor or by a Subcontractor or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable:

1. claims under workers’ compensation, disability benefit and other similar employee benefit acts which are applicable to the Work to be performed;
2. claims for damages because of bodily injury, occupational sickness or disease, or death of the Contractor’s employees;
3. claims for damages because of bodily injury, sickness or disease, or death of any person other than the Contractor’s employees;
4. claims for damages by reason of personal injury liability coverage;
5. claims of damages, other than the Work itself, because of injury to or destruction of tangible property, including loss of use resulting therefrom;
6. claims for damages because of bodily injury, sickness or death of a person or property damage arising out of ownership, maintenance or use of a motor vehicle;
7. claims for bodily injury or property damage arising out of completed operations; and
8. claims involving contractual liability insurance applicable to the Contractor’s obligations under Section 3.18.

§ 11.1.2 The insurance required by Section 11.1.1 shall be written for not less than limits of liability specified in the Contract Documents or required by law, whichever coverage is greater. Coverages whether written on an occurrence or claims-made basis, shall be maintained without interruption from date of commencement of the Work until date of final payment and termination of any coverage required to be maintained after final payment.

§ 11.1.3 Certificates of insurance acceptable to the Owner shall be filed with the Owner prior to commencement of the Work. These certificates and the insurance policies required by this Section 11.1 shall contain a provision that coverages afforded under the policies will not be canceled or allowed to expire until at least 30 days’ prior written notice has been given to the owner. If any of the foregoing insurance coverages are required to remain in force after final payment and are reasonably available, an additional certificate evidencing continuation of such coverage shall be submitted with the final Application for Payment as required by Section 9.10.2. Information concerning reduction of coverage on account of revised limits or claims paid under the General Aggregate, or both, shall be furnished by the Contractor with reasonable promptness in accordance with the Contractor’s information and belief.

§ 11.2 OWNER’S LIABILITY INSURANCE
§ 11.2.1 The Owner shall be responsible for purchasing and maintaining the Owner’s usual liability insurance.

§ 11.3 PROJECT MANAGEMENT PROTECTIVE LIABILITY INSURANCE
§ 11.3.1 Optionally, the Owner may require the Contractor to purchase and maintain Project Management Protective Liability insurance from the Contractor’s usual sources as primary coverage for the Owner’s, Contractor’s, and Architect’s vicarious liability for construction operations under the Contract. Unless otherwise required by the Contract Documents, the Owner shall reimburse the Contractor by increasing the Contract Sum to pay the cost of purchasing and maintaining such optional insurance coverage, and the Contractor shall not be responsible for purchasing any other liability insurance on behalf of the Owner. The minimum limits of liability purchased with such coverage shall be equal to the aggregate of the limits required for Contractor’s Liability Insurance under Sections 11.1.1.2 through 11.1.1.5.
§ 11.3.2 To the extent damages are covered by Project Management Protective Liability insurance, the Owner, Contractor and Architect waive all rights against each other for damages, except such rights as they may have to the proceeds of such insurance. The policy shall provide for such waivers of subrogation by endorsement or otherwise.

§ 11.3.3 The Owner shall not require the Contractor to include the Owner, Architect or other persons or entities as additional insureds on the Contractor's Liability Insurance coverage under Section 11.1.

§ 11.4 PROPERTY INSURANCE
§ 11.4.1 Unless otherwise provided, the Owner shall purchase and maintain, in a company or companies lawfully authorized to do business in the jurisdiction in which the Project is located, property insurance written on a builder's risk, "all-risk," or equivalent policy form in the amount of the initial Contract Sum, plus value of subsequent Contract modifications and cost of materials supplied or installed by others, comprising total value for the entire Project at the site on a replacement cost basis without optional deductibles. Such property insurance shall be maintained, unless otherwise provided in the Contract Documents or otherwise agreed in writing by all persons and entities who are beneficiaries of such insurance, until final payment has been made as provided in Section 9.10 or until no person or entity other than the Owner has an insurable interest in the property required by this Section 11.4 to be covered, whichever is later. This insurance shall include interests of the Owner, the Contractor, Subcontractors and Sub-subcontractors in the Project.

§ 11.4.1.1 Property insurance shall be on an "all-risk" or equivalent policy form and shall include, without limitation, insurance against the perils of fire (with extended coverage) and physical loss or damage including, without duplication of coverage, theft, vandalism, malicious mischief, collapse, earthquake, flood, windstorm, falsework, testing and startup, temporary buildings and debris removal including demolition occasioned by enforcement of any applicable legal requirements, and shall cover reasonable compensation for Architect's and Contractor's services and expenses required as a result of such insured loss.

§ 11.4.1.2 If the Owner does not intend to purchase such property insurance required by the Contract and with all of the coverages in the amount described above, the Owner shall so inform the Contractor in writing prior to commencement of the Work. The Contractor may then effect insurance which will protect the interests of the Contractor, Subcontractors and Sub-subcontractors in the Work, and by appropriate Change Order the cost thereof shall be charged to the Owner. If the Contractor is damaged by the failure or neglect of the Owner to purchase or maintain insurance as described above, without so notifying the Contractor in writing, then the Owner shall bear all reasonable costs properly attributable thereto.

§ 11.4.1.3 If the property insurance requires deductibles, the Owner shall pay costs not covered because of such deductibles.

§ 11.4.1.4 This property insurance shall cover portions of the Work stored off the site, and also portions of the Work in transit.

§ 11.4.1.5 Partial occupancy or use in accordance with Section 9.9 shall not commence until the insurance company or companies providing property insurance have consented to such partial occupancy or use by endorsement or otherwise. The Owner and the Contractor shall take reasonable steps to obtain consent of the insurance company or companies and shall, without mutual written consent, take no action with respect to partial occupancy or use that would cause cancellation, lapse or reduction of insurance.

§ 11.4.2 Boiler and Machinery Insurance. The Owner shall purchase and maintain boiler and machinery insurance required by the Contract Documents or by law, which shall specifically cover such insured objects during installation and until final acceptance by the Owner; this insurance shall include interests of the Owner, Contractor, Subcontractors and Sub-subcontractors in the Work, and the Owner and Contractor shall be named insureds.

§ 11.4.3 Loss of Use Insurance. The Owner, at the Owner's option, may purchase and maintain such insurance as will insure the Owner against loss of use of the Owner's property due to fire or other hazards, however caused. The Owner waives all rights of action against the Contractor for loss of use of the Owner's property, including consequential losses due to fire or other hazards however caused.
§ 11.4.4 If the Contractor requests in writing that insurance for risks other than those described herein or other special causes of loss be included in the property insurance policy, the Owner shall, if possible, include such insurance, and the cost thereof shall be charged to the Contractor by appropriate Change Order.

§ 11.4.5 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, the Owner shall waive all rights in accordance with the terms of Section 11.4.7 for damages caused by fire or other causes of loss covered by this separate property insurance. All separate policies shall provide this waiver of subrogation by endorsement or otherwise.

§ 11.4.6 Before an exposure to loss may occur, the Owner shall file with the Contractor a copy of each policy that includes insurance coverages required by this Section 11.4. Each policy shall contain all generally applicable conditions, definitions, exclusions and endorsements related to this Project. Each policy shall contain a provision that the policy will not be canceled or allowed to expire, and that its limits will not be reduced, until at least 30 days prior written notice has been given to the Contractor.

§ 11.4.7 Waivers of Subrogation. The Owner and Contractor waive all rights against (1) each other and any of their subcontractors, sub-subcontractors, agents and employees, each of the other, and (2) the Architect. Architect’s consultants, separate contractors described in Article 6, if any, and any of their subcontractors, sub-subcontractors, agents and employees, for damages caused by fire or other causes of loss to the extent covered by property insurance obtained pursuant to this Section 11.4 or other property insurance applicable to the Work, except such rights as they have to proceeds of such insurance held by the Owner as fiduciary. The Owner or Contractor, as appropriate, shall require of the Architect, Architect’s consultants, separate contractors described in Article 6, if any, and the subcontractors, sub-subcontractors, agents and employees of any of them, by appropriate agreements, written where legally required for validity, similar waivers in favor of other parties enumerated herein. The policies shall provide such waivers of subrogation by endorsement or otherwise. A waiver of subrogation shall be effective as to a person or entity even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise, did not pay the insurance premium directly or indirectly, and whether or not the person or entity had an insurable interest in the property damaged.

§ 11.4.8 A loss insured under Owner’s property insurance shall be adjusted by the Owner as fiduciary and made payable to the Owner as fiduciary for the insureds as their interests may appear, subject to requirements of any applicable mortgage clause and of Section 11.4.10. The Contractor shall pay Subcontractors their just shares of insurance proceeds received by the Contractor, and by appropriate agreements, written where legally required for validity, shall require Subcontractors to make payments to their Sub-subcontractors in similar manner.

§ 11.4.9 If required in writing by a party in interest, the Owner as fiduciary shall, upon occurrence of an insured loss, give bond for proper performance of the Owner’s duties. The cost of required bonds shall be charged against proceeds received as fiduciary. The Owner shall deposit in a separate account proceeds so received, which the Owner shall distribute in accordance with such agreement as the parties in interest may reach, or in accordance with an arbitration award in which case the procedure shall be as provided in Section 4.6. If after such loss no other special agreement is made and unless the Owner terminates the Contract for convenience, replacement of damaged property shall be performed by the Contractor after notification of a Change in the Work in accordance with Article 7.

§ 11.4.10 The Owner as fiduciary shall have power to adjust and settle a loss with insurers unless one of the parties in interest object in writing within five days after occurrence of loss to the Owner’s exercise of this power; if such objection is made, the dispute shall be resolved as provided in Sections 4.5 and 4.6. The Owner as fiduciary shall, in the case of arbitration, make settlement with insurers in accordance with directions of the arbitrators. If distribution of insurance proceeds by arbitration is required, the arbitrators will direct such distribution.

§ 11.5 PERFORMANCE BOND AND PAYMENT BOND

§ 11.5.1 The Owner shall have the right to require the Contractor to furnish bonds covering faithful performance of the Contract and payment of obligations arising thereunder as stipulated in bidding requirements or specifically required in the Contract Documents on the date of execution of the Contract.
§ 11.5.2 Upon the request of any person or entity appearing to be a potential beneficiary of bonds covering payment of obligations arising under the Contract, the Contractor shall promptly furnish a copy of the bonds or shall permit a copy to be made.

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 required 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 which 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, costs of uncovering and replacement shall be at the Contractor's expense. If such Work is not in accordance with the Contract Documents, correction shall be at the Contractor's expense unless the condition was caused by the Owner or a separate contractor in which event the Owner shall be responsible for payment of such costs.

§ 12.2 CORRECTION OF WORK
§ 12.2.1 BEFORE OR AFTER SUBSTANTIAL COMPLETION
§ 12.2.1.1 The Contractor shall promptly correct Work rejected by the Architect or failing to conform to the requirements of the Contract Documents, whether discovered before or after Substantial Completion and whether or not fabricated, installed or completed. Costs of correcting such rejected Work, including additional testing and inspections and compensation for the Architect’s services and expenses made necessary thereby, shall be at the Contractor's expense.

§ 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 designated portion thereof or after the date for commencement of warranties established under Section 9.9.1, or by terms of an applicable special warranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, the Contractor shall correct it promptly after receipt of written notice from the Owner to do so unless the Owner has previously given the Contractor a written acceptance of such condition. The Owner shall give such notice promptly after discovery of the condition. During the one-year period for correction of Work, if the Owner fails to notify the Contractor and give the Contractor an opportunity to make the correction, the Owner waives the rights to require correction by the Contractor and to make a claim for breach of warranty. If the Contractor fails to correct nonconforming Work within a reasonable time during that period after receipt of notice from the Owner or Architect, the Owner may correct it in accordance with Section 2.4.

§ 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 performance of the Work.

§ 12.2.2.3 The one-year period for correction of Work shall not be extended by corrective Work performed by the Contractor pursuant to this Section 12.2.

§ 12.2.3 The Contractor shall remove from the site portions of the Work which are not in accordance with the requirements of the Contract Documents and are neither corrected by the Contractor nor accepted by the Owner.

§ 12.2.4 The Contractor shall bear the cost of correcting destroyed or damaged construction, whether completed or partially completed, of the Owner or separate contractors caused by the Contractor's correction or removal of Work which 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 which the Contractor might have 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...
§ 12.3 ACCEPTANCE OF NONCONFORMING WORK
§ 12.3.1 If the Owner prefers to accept Work which 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
§ 13.1.1 The Contract shall be governed by the law of the place where the Project is located.

§ 13.2 SUCCESSORS AND ASSIGNS
§ 13.2.1 The Owner and Contractor respectively bind themselves, their partners, successors, assigns and legal representatives to the other party hereto and to partners, successors, assigns and legal representatives of such other party in respect to covenants, agreements and obligations contained in the Contract Documents. Except as provided in Section 13.2.2, neither party to the Contract shall assign the Contract as a whole without written consent of the other. If either party attempts to make such an assignment without such consent, that party shall nevertheless remain legally responsible for all obligations under the Contract.

§ 13.2.2 The Owner may, without consent of the Contractor, assign the Contract to an institutional lender providing construction financing for the Project. In such event, the lender shall assume the Owner’s rights and obligations under the Contract Documents. The Contractor shall execute all consents reasonably required to facilitate such assignment.

§ 13.3 WRITTEN NOTICE
§ 13.3.1 Written notice shall be deemed to have been duly served if delivered in person to the individual or a member of the firm or entity or to an officer of the corporation for which it was intended, or if delivered at or sent by registered or certified mail to the last business address known to the party giving notice.

§ 13.4 RIGHTS AND REMEDIES
§ 13.4.1 Duties and obligations imposed by the Contract Documents and rights and remedies available thereunder shall be in addition to and not a limitation of duties, obligations, rights and remedies otherwise imposed or available by law.

§ 13.4.2 No action or failure to act by the Owner, 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 in writing.

§ 13.5 TESTS AND INSPECTIONS
§ 13.5.1 Tests, inspections and approvals of portions of the Work required by the Contract Documents or by laws, ordinances, rules, regulations or orders of public authorities having jurisdiction shall be made at an appropriate time. Unless otherwise provided, the Contractor shall make arrangements for such tests, inspections and approvals with an independent testing laboratory or entity acceptable to the Owner, or with the appropriate public authority, and shall bear all related costs of tests, inspections and approvals. The Contractor shall give the Architect timely notice of when and where tests and inspections are to be made so that the Architect may be present for such procedures. The Owner shall bear costs of tests, inspections or approvals which do not become requirements until after bids are received or negotiations concluded.

§ 13.5.2 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 13.5.1, 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 13.5.3, shall be at the Owner’s expense.
§ 13.5.3 If such procedures for testing, inspection or approval under Sections 13.5.1 and 13.5.2 reveal failure of the portions of the Work to comply with requirements established by the Contract Documents, 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.

§ 13.5.4 Required certificates of testing, inspection or approval shall, unless otherwise required by the Contract Documents, be secured by the Contractor and promptly delivered to the Architect.

§ 13.5.5 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.

§ 13.5.6 Tests or inspections conducted pursuant to the Contract Documents shall be made promptly to avoid unreasonable delay in the Work.

§ 13.6 INTEREST
§ 13.6.1 Payments due and unpaid under the Contract Documents shall bear interest from the date payment is due at such rate as the parties may agree upon in writing or, in the absence thereof, at the legal rate prevailing from time to time at the place where the Project is located.

§ 13.7 COMMENCEMENT OF STATUTORY LIMITATION PERIOD
§ 13.7.1 As between the Owner and Contractor:

1. Before Substantial Completion. As to acts or failures to act occurring prior to the relevant date of Substantial Completion, any applicable statute of limitations shall commence to run and any alleged cause of action shall be deemed to have accrued in any and all events not later than such date of Substantial Completion;

2. Between Substantial Completion and Final Certificate for Payment. As to acts or failures to act occurring subsequent to the relevant date of Substantial Completion and prior to issuance of the final Certificate for Payment, any applicable statute of limitations shall commence to run and any alleged cause of action shall be deemed to have accrued in any and all events not later than the date of issuance of the final Certificate for Payment; and

3. After Final Certificate for Payment. As to acts or failures to act occurring after the relevant date of issuance of the final Certificate for Payment, any applicable statute of limitations shall commence to run and any alleged cause of action shall be deemed to have accrued in any and all events not later than the date of any act or failure to act by the Contractor pursuant to any Warranty provided under Section 3.5, the date of any correction of the Work or failure to correct the Work by the Contractor under Section 12.2, or the date of actual commission of any other act or failure to perform any duty or obligation by the Contractor or Owner, whichever occurs last.

ARTICLE 14 TERMINATION OR SUSPENSION OF THE CONTRACT
§ 14.1 TERMINATION BY THE CONTRACTOR
§ 14.1.1 The Contractor may terminate the Contract if the Work is stopped for a period of 30 consecutive days through no act or fault of the Contractor or a Subcontractor, Sub-subcontractor or their agents or employees or any other persons or entities performing portions of the Work under direct or indirect contract with the Contractor, for any of the following reasons:

1. issuance of an order of a court or other public authority having jurisdiction which requires all Work to be stopped;

2. an act of government, such as a declaration of national emergency which 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 Documents; or

4. the Owner has failed to furnish to the Contractor promptly, upon the Contractor's request, reasonable evidence as required by Section 2.2.1.

§ 14.1.2 The Contractor may terminate the Contract if, through no act or fault of the Contractor or a Subcontractor, Sub-subcontractor or their agents or employees or any other persons or entities performing portions of the Work under direct or indirect contract with the Contractor, repeated suspensions, delays or interruptions of the entire Work.
by the Owner as described in Section 14.3 constitute in the aggregate more than 100 percent of the total number of
days scheduled for completion, or 120 days in any 365-day period, whichever is less.

§ 14.1.3 If one of the reasons described in Section 14.1.1 or 14.1.2 exists, the Contractor may, upon seven days'
written notice to the Owner and Architect, terminate the Contract and recover from the Owner payment for Work
executed and for proven loss with respect to materials, equipment, tools, and construction equipment and machinery,
including reasonable overhead, profit and damages.

§ 14.1.4 If the Work is stopped for a period of 60 consecutive days through no act or fault of the Contractor or a
Subcontractor or their agents or employees or any other persons performing portions of the Work under contract
with the Contractor because the Owner has persistently 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’ written 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 persistently or repeatedly refuses or fails to supply enough properly skilled workers or proper
materials;
.2 fails to make payment to Subcontractors for materials or labor in accordance with the respective
agreements between the Contractor and the Subcontractors;
.3 persistently disregards laws, ordinances, or rules, regulations or orders of a public authority having
jurisdiction; or
.4 otherwise is guilty of substantial breach of a provision of the Contract Documents.

§ 14.2.2 When any of the above reasons exist, the Owner, upon certification by the Architect that sufficient cause
exists to justify such action, may without prejudice to any other rights or remedies of the Owner and after giving the
Contractor and the Contractor’s surety, if any, seven days’ written notice, terminate employment of the Contractor
and may, subject to any prior rights of the surety:
.1 take possession of the site and 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 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.

§ 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 Architect, upon application, and this obligation for payment shall survive
termination of the Contract.

§ 14.3 SUSPENSION BY THE OWNER FOR CONVENIENCE
§ 14.3.1 The Owner may, without cause, order the Contractor in writing to suspend, delay or interrupt the Work in
whole or in part for such period of time as the Owner may determine.

§ 14.3.2 The Contract Sum and Contract Time shall be adjusted for increases in the cost and time caused by
suspension, delay or interruption as described in Section 14.3.1. Adjustment of the Contract Sum shall include
profit. No adjustment shall be made to the extent:
.1 that performance is, was or would have been so suspended, delayed or interrupted by another cause
for which the Contractor is responsible; or
.2 that an equitable adjustment is made or denied under another provision of 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 such termination for the Owner's convenience, the Contractor shall:

.1 cease operations as directed by the Owner in the notice;
.2 take actions necessary, or that the Owner may direct, for the protection and preservation of the Work;
and
.3 except for Work directed to be performed prior to the effective date of termination stated in the notice, terminate all existing subcontracts and purchase orders and enter into no further subcontracts and purchase orders.

§ 14.4.3 In case of such termination for the Owner's convenience, the Contractor shall be entitled to receive payment for Work executed, and costs incurred by reason of such termination, along with reasonable overhead and profit on the Work not executed.
Additions and Deletions Report for
AIA® Document A201™ – 1997

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 11:13:06 on 12/18/2008.

There are no differences.
Certification of Document’s Authenticity
AIA® Document D401™ – 2003

I, Robert Rollins, 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 11:13:06
on 12/18/2008 under Order No. 1000347228_1 from AIA Contract Documents software and that in preparing
the attached final document I made no changes to the original text of AIA® Document A201™ – 1997 - General
Conditions of the Contract for Construction, as published by the AIA in its software, other than those additions and
deletions shown in the associated Additions and Deletions Report.

(Signed)

(Title)

(Dated)
SECTION 00 72 14

AIA DOCUMENT A201-1997

GENERAL CONDITIONS WCPS SUPPLEMENT
Supplement to the General Conditions of the Contract for Construction AIA Document A201 - 1997

Paragraph 1.1.1; ADD the following to the end of the paragraph:

1.1.1 “Written material incorporated within the Agreement shall have precedence, and shall supersede conflicting requirements of the other Contract Documents. However, this provision shall apply only where such written material is explicit and clearly and fully enumerated within the Agreement, all provisions of various Contract Documents shall remain in force; notwithstanding all prior negotiations, representations, or agreements, either written or oral, including the Bidding Documents.”

Paragraph 1.1; ADD the following subparagraph

1.1.8 ADDENDA – Addenda are written or graphic instruction issued prior to the execution of the Contract which modifies or interprets the Bidding Documents, including Drawings, Specifications, by additions, deletions, clarifications, or corrections. Addenda will become part of the Contract Documents when the Construction Contract is executed.

Paragraph 1.2.3; ADD the following subparagraphs

1.2.1.1 It is the responsibility of each Bidder, Contractor and Subcontractor to familiarize himself with the provisions of the Contract Documents.

1.2.1.2 Alleged conflicts or ambiguities shall be brought in writing to the attention of the Architect prior to Proposal Submission. The Architect shall then issue a written interpretation in the form of an Addendum treating the area in question.

1.2.1.3 Should an alleged conflict or ambiguity be discovered after Proposal submission, it is agreed that the Contractor and/or Subcontractor shall be deemed to have estimated the work on the provisions and interpretation as may be directed by the Architect. It is understood that this provision shall not require the performance of any work unless such work is covered within the Contract Documents or is reasonably inferable there from as being necessary to produce the intended results.

1.2.1.4 If in the language of the Contract Documents it is alleged that certain provisions, words, phrases, and sentences may be considered unclear, equivocal, conflicting or ambiguous, it is understood and agreed, under the Contract, that they shall be interpreted by the Architect based on complementary provisions of all documents, the context of item in question, and the intent of the Architect.

1.2.1.5 Where any item of work or piece of equipment is referred to in the singular, it shall be deemed to apply to as many such items or pieces of equipment as required for a complete installation.

1.2.1.6 Words such as include, provide, install, perform, apply, construct, supply, erect or similar instructions contained within the Contract Document are comprehensive actions to be performed by Contractor. Unless deliberately stated or otherwise indicated by contrasting wording, the above mentioned words shall include all others listed above.

1.2.1.7 The term “noted” or “as indicated” shall mean as shown, indicated or noted on the Drawings or in the Specifications or on any other Contract Document.

1.2.1.8 The term “typical” means a representative example to be repeated in all similar situations. However, minor variations where necessary to adapt the typical item to a specific situation shall be included.
1.2.9 Where reference is made to a text, standard, federal specification, manufacturer’s directions, or to other publication, the latest publication published prior to the date of issuance of Contract Documents shall apply, unless identified in Specification by a specific publication date.

1.2.10 Locations, sizes, and depth of existing services (i.e. manholes, utilities, etc.) are indicated are based on records made available by the utility companies and/or the authorities having jurisdiction. Under the work of each applicable section, examine the premises and verify visible, existing conditions prior to proposal submission and the starting of work.

1.2.11 Drawing indications of items are generally diagrammatic. Connection and anchorage of materials, interconnection of equipment and accessories necessary to any system operation not otherwise detailed or specified shall be selected under the work of each section, subject to Architect’s approval, to suit the requirements of the items.

Paragraph 1.2.2; DELETE paragraph 1.2.2, and replace in lieu thereof the following NEW paragraph

1.2.2 The organization of the Specifications into divisions, sections and paragraphs, and arrangement of Drawings shall in no way be construed to control or limit the manner in which the Contractor performs the work among his Subcontractors, nor shall they relieve the Contractor of his responsibility to perform the work, drawn and/or specified, in its entirety.”

Paragraph 1.2.2; ADD the following subparagraph

1.2.2.1 Wherever in the Specifications there appears a reference to a “Contractor” or to the “Subcontractor” or a reference to a Contractor, installer or supplier of a particular trade, or for a particular type of Work, such reference, regardless of the language thereof, shall be deemed a reference to the Contractor. It shall not be construed as relieving the Contractor from the duty to perform all of the Work and other obligations provided for under this Contract.

Paragraph 1.2; ADD the following subparagraphs

1.2.4 Computed dimensions shall take precedence over scaled dimensions and large scale drawings over small scale drawings. The drawings are intended to show the general arrangement, design and extent of the Work, and are partly diagrammatic; they are not to be scaled or used in lieu of shop drawings were required.

1.2.5 Should the Drawings disagree in themselves, or with the Specifications, the better quality or greater quantity of Work or materials shall be used for the purpose of bidding and, unless otherwise ordered in writing shall be provided.

1.2.6 Where typical or representative detail is shown on the drawings, this detail shall constitute the standard in workmanship and materials throughout corresponding parts of the Work and, when necessary, the Contractor shall be required to adapt such detail for use in said corresponding parts of the Work, said adaptation however, shall be subject to the consent of the Architect.

Paragraph 1.5.2; ADD the following to the end of the paragraph.

1.5.2 “General information of existing conditions is available in the project manual.”

Paragraph 2.1.1; DELETE paragraph 2.1.1, and replace in lieu thereof the following NEW paragraph:

2.1.1 The Owner is the Board of Education of Washington County identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The term “Owner” means the Owner or the Owner’s authorized representative. Where the word “Architect” occurs in these specifications, it shall be taken to designate either Architect or Engineer.

Paragraph 2.1.2; DELETE paragraph 2.1.2, and replace in lieu thereof the following NEW paragraph:

2.1.2 The Contractor understands that the Board of Education of Washington County is a public agency and no mechanics liens are permitted against its property.

Paragraph 2.2.1; DELETE in its entirety.
Paragraph 2.2.3 DELETE paragraph 2.2.3, and replace in lieu thereof the following NEW paragraph:

2.2.3 The Owner shall furnish surveys describing physical characteristics, legal limitations and utility locations for the site of the Project, and a legal description of the site to the extent reasonably required for the execution of the Work and requested by the Contractor in writing within one (1) month of the date of the Contract. The Owner does not warrant or undertake responsibility for the location of utilities or the accuracy of tests concerning the soil, surface, and subsurface conditions.

Paragraph 2.2.4; DELETE paragraph 2.2.4, and replace in lieu thereof the following NEW paragraph:

2.2.4 Information or services under the Owner’s control shall at the Contractor’s written request be furnished by the Owner with reasonable promptness to avoid delay in orderly progress of the Work.

Paragraph 2.2.5; DELETE paragraph 2.2.5, and replace in lieu thereof the following NEW paragraph:

2.2.5 The Contractor is responsible for obtaining and maintaining their own copies of Drawings and Project Manuals as necessary for execution of the Work.

Paragraph 2.3.1; DELETE paragraph 2.3.1, and replace in lieu thereof the following NEW paragraph:

2.3.1 If the Contractor fails to correct Work which is not in accordance with the requirements of the Contract Documents as required by Section 12.2 or persistently fails to carry out Work in accordance with the Contract Documents, the Owner, by written order signed personally or by an agent specifically so empowered by the Owner in writing, may order the Contractor to stop the Work, or any portion thereof, without additional charge, claim, or penalty 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. This right shall be in addition to and not in restriction or derogation of the Owner’s rights under Section 4.3.4.

Paragraph 2.3; ADD the following subparagraph:

2.3.2 If unforeseen conditions occur or are encountered which may substantially impair the quality of the Work unless the Work is suspended, the Owner may suspend the Work by written notice to the Contractor. In the event of such a suspension, Contractor shall be entitled to only adjustments in the Contract Time and an adjustment in the Contract Sum for costs actually incurred at the Project site by reason of such suspension. In any event where the Contractor reasonably determines that a suspension is required in such circumstances the Contractor shall promptly provide written notification to the Owner, and Architect of such determination.

Paragraph 2.4.1; DELETE paragraph 2.4.1, and replace in lieu thereof the following NEW paragraph:

2.4.1 If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within a seven-day period after receipt of written notice from the Owner to commence and continue correction of such default or neglect with diligence and promptness, the Owner may after such seven-day period 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 the Contractor the cost of correcting such deficiencies, including compensation for the Owner, and Architect’s and their respective consultants’ additional services and expenses 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.

Paragraph 3.2.1; ADD the following as the first sentence of the paragraph:

3.2.1 “The Contractor warrants that it has made itself familiar with the project site, including soils, surface and subsurface conditions and the location of utilities, and the improvements to be constructed.”
Paragraph 3.3.1; ADD the following subparagraphs:

3.3.1.1 Any construction means, methods, technique, sequence, and procedures specified within the Contract Documents are to establish minimum standards only.

3.3.1.2 Nothing contained within the Contract Documents shall be construed as limiting the Contractor’s sole responsibility under this Article.

Paragraph 3.3.3; ADD the following subparagraph:

3.3.3.1 All inspections required by law shall be obtained by the Contractor including but not limited to those required by law to be obtained by the Owner and no failure of the Owner to obtain such inspection shall constitute a waiver of Contractor’s obligation hereunder. The Contractor shall notify the Owner of any application for inspection required to be executed by the Owner.

Paragraph 3.4.2; DELETE paragraph 3.4.2, and replace in lieu thereof the following NEW paragraph:

3.4.2 If the specification has listed three (3) or more product lines, substitutions will not be considered. Where less than three (3) manufacturers or products are listed in the Specifications, or the specification lists “Approved Equal” as an acceptable product, the burden of proof of equivalency rests with the Contractor and evidence shall be submitted to the Architect and approved by Architect with final approval to be determined by the Owner. Criteria includes but is not limited to performance, materials, craftsmanship, quality control, certification procedures or requirements, warranty, installation procedures, etc. Any proposed substitution, or proposed equal product, must be submitted to the Architect for review, 10 days prior to the bid date. After the receipt of bids and award of the Contract, the Owner and Architect are under no obligation to review or approve requests for substitution or equal products that were not specifically mentioned in the Specifications. The Owner reserves the right to request a substitute at any time in the project.

Paragraph 3.4.3; ADD the following to the end of the paragraph:

3.4.3 The Contractor shall at all times be in control of the Work and shall be responsible for the safety of his employees, subcontractors, sub-subcontractors, and their employees.

Paragraph 3.4; ADD the following subparagraphs:

3.4.4 Not later than ten (10) days from the Contract Date, the Contractor shall provide to the Architect, and the Owner a list showing the name of the manufacturer proposed to be used for each of the products identified in the Specifications, and, where applicable, the name of the installing Subcontractor.

3.4.5 The Architect will promptly reply in writing to the Contractor stating whether the Owner or the Architect, after due investigation, has reasonable objection to such proposal. If adequate data on any proposed manufacturer or installer is not available, the Architect may state that action will be deferred until the Contractor provides further data. Failure of the Owner or Architect to reply promptly shall not constitute notice of no reasonable objection. Acceptance of a substitute manufacturer must conform to such requirements.

3.4.6 By making requests for substitutions based on Clause 3.4.6 above, the Contractor: (a) represents that he has personally investigated the proposed substitute product and determined that it is equal or superior in all respects to that specified; (b) represents that he will provide the same warranty for the substitution that he would for that specified; (c) certifies that the cost data presented is complete and includes all related costs under his Contract, but excludes additional costs related to the substitution which subsequently become apparent: and (d) will coordinate the installation of the accepted substitute, making such changes as may be required for the work to be complete in all respects.

3.4.7 By law, all school sites are drug, alcohol and tobacco free.

3.4.8 Asbestos-Free Products. All products intended for use on this project shall be free of asbestos material in compliance with the Local, State and Federal laws and regulations.
3.4.9 Lead-Free-Paint. All paint used on this project shall be lead free. This requirement applies to all coatings, including materials applied at the place of fabrication or field application.

Paragraph 3.5.1; DELETE paragraph 3.5.1, and replace in lieu thereof the following NEW paragraph:

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 otherwise required or permitted by the Contract Documents, that the Work be free from defects, and that the Work will conform with the requirements of the Contract Documents. Work not conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective. The Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

Paragraph 3.5; ADD the following subparagraphs:

3.5.2 Provisions of these Contract Documents, including specified guarantees, shall not limit the extent or nature of any warranty or guarantee under the law; or limit the extent or nature of other warranty or guarantee provisions either expressed or implied, including warranties of merchantability or fitness for particular use.

3.5.3 Any Contract or Purchase pertaining to this project shall provide the Owner as ultimate user, with the right to all warranties and guarantees.

3.5.4 No Contract or Purchase pertaining to this project shall allow for waiver of warranties or guarantees.

3.5.5 Except as provided by the technical Specification Sections, each Contractor shall warrant all materials, workmanship, and equipment against original defects or against injury from proper and usual wear for a period of not less than two (2) years from the date of Substantial Completion of the project or designated portion thereof and shall repair or replace, at no additional cost to the Owner, any item which may become defective within the warranty period. Any exceptions or additions to this Paragraph are noted in the technical Specifications Sections. This Paragraph shall in no way limit the Contractor’s obligation to warrant the work as identified in any other provisions of the Contract Documents.

Paragraph 3.6.1; DELETE paragraph 3.6.1, and replace in lieu thereof the following NEW paragraph:

3.6.1 The Contractor shall pay sales, consumer, use and similar taxes for the Work, or portions thereof, provided by the Contractor which are legally enacted when bids are received whether or not yet effective or merely scheduled to go into effect.

Paragraph 3.6.1; ADD the following subparagraph:

3.6.1.1 Contractor shall pay all costs associated with the performance of the work.

Paragraph 3.7.1; DELETE paragraph 3.7.1, and replace in lieu thereof the following NEW paragraph:

3.7.1 Unless otherwise provided in the Contract Documents, the Owner shall secure and pay for the building permit and the Contractor shall secure and pay for all other permits and governmental fees, licenses and inspections necessary for proper execution and completion of the Work which are customarily secured after execution of the Contract and which are legally required when bids are received. Provisions of this Paragraph shall apply to all items of work both permanent and temporary. The Owner will not reimburse the Contractor for the cost of elective permits which the Contractor chooses to secure in conjunction with his means and methods of executing the work or for any off-site permits. All permit fees not waived by the Governing Authorities will be reimbursed to the Contractor by Washington County Public Schools with no mark up of overhead, profit, or bond to the Contractor. The Owner will be responsible for payment of all utility connection fees.
Paragraph 3.7.3; DELETE paragraph 3.7.3, and replace in lieu thereof the following NEW paragraph:

3.7.3 The Contractor shall review the Contract Documents to ascertain that the Contract Documents are to be best of the Contractor’s knowledge in accordance with applicable laws, statutes, ordinances, building codes, and rules and regulations. The Contractor shall promptly notify the Architect and Owner in writing, of any variance therewith and necessary changes shall be accomplished by appropriate Modification.

Paragraph 3.7.4; DELETE paragraph 3.7.4, and replace in lieu thereof the following NEW paragraph:

3.7.4 If the Contractor performs Work knowing it to be contrary to laws, statutes, ordinances, building codes, and rules and regulations without such notice to the Architect and Owner, the Contractor shall assume full responsibility for such Work and shall bear the attributable costs.

Paragraph 3.8.1; DELETE paragraph 3.8.1, and replace in lieu thereof the following NEW paragraph:

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

Paragraph 3.8.2, Item 3; DELETE the following sentence:

3.8.2 3. The amount of the Change Order shall reflect (1) the difference between actual costs and the allowances under Section 3.8.2.1 and (2) Changes in Contract’s costs under Section 3.8.2.2.

Paragraph 3.9; ADD the following subparagraphs:

3.9.2 Within five (5) days following the award of the Contract, the Contractor shall furnish to the Owner a detailed resume of the proposed project manager, superintendent and assistant superintendent for the project. The Owner may make such investigations as he deems necessary to determine the qualifications of the proposed persons to perform their duties, and the Contractor shall furnish to the Owner all such information and data for this purpose as the Owner may request. The Owner reserves the right to reject the candidates if the evidence submitted by or investigation of, the Contractor fails to satisfy the Owner that they are qualified to perform the duties.

3.9.3 An experienced project manager must be assigned to this project. His duties generally are to set schedules, to coordinate with the Architect’s office and the field, to expedite subcontractors, to handle paperwork, to represent the Contractor in meetings and to maintain documentation in a timely manner. Communicating with the Architect and the Owner is an extremely important part of this job. If the project manager does not maintain the prompt performance of his duties, the Owner can direct the replacement and the approval of personnel for the position.

3.9.4 The position of superintendent is to be one of managing the Work on site and not to assist in any of the physical construction work. His duties are to coordinate, plan, problem solve, and keep the Work on schedule. He shall have an assistant superintendent who is at the work observing the subcontractors, anticipating material needs and to assist the superintendent as required. He also will be in charge and performing any other duties when the superintendent is absent. No work shall be done without one of these personnel there at the Work, including weekends, evenings, and holidays.

3.9.5 If the above personnel do not perform their duties to the Owner’s satisfaction, the Owner may order him replaced and the Contractor shall comply therewith. No claim will be allowed for actions by the Owner under this provision.

3.9.6 The Contractor shall coordinate and supervise the work of the subcontractors to the end so that the Work is carried out without conflict between trades and so that no trade, at any time, causes delay to the general progress of the work. The Contractors and Subcontractors shall at all times afford each trade, any separate Contractor, or the Owner, every reasonable opportunity for the installation of Work and the storage of materials.
Paragraph 3.10.1; ADD the following subparagraph:

3.10.1.1 The Contractor shall revise and update construction schedule for the Work on a monthly basis, and submit to Owner and Architect. The Construction Schedule shall give accurate representation to the entire Project, for all completed, current, and planned activities within scope of Project, and include all respective dates.

Paragraph 3.11.1; ADD the following to the end of the paragraph:

3.11.1 This shall be completed prior to final payment and shall be executed by the Contractor certifying that they have been kept in accordance with the provisions of this subparagraph and accurately reflect the construction of the Work as built. In addition to one copy of Drawings, Specifications, Addenda, Shop Drawings, Change Orders and Modifications, the Contractor shall maintain one additional set of Contract Documents to be used solely as a record for the future preparation of “As-Built” Drawings. The Contractor shall record all changes and departures from the Contract Documents (floor plans, site plans, ceiling plans, etc.) and the correct locations of concealed work, recording them in red ink on the Documents maintained for this purpose. Recording shall be made immediately after each item of work is completed. At the completion of the Project and before a final payment is made, the Contractor shall deliver these documents to the Architect.

Paragraph 3.12.2; DELETE paragraph 3.12.2, and replace in lieu thereof the following NEW paragraph:

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 or systems for some portion of the work.

Paragraph 13.12; ADD the following subparagraph:

3.12.11 Submittal review times listed in the Contract Documents are the minimum review time per submission. The Architect is not obligated to approve submittals on the first submission or any subsequent submission if the submittals are incomplete or require revision. It is the responsibility of the Contractor to schedule submittals well in advance of order and delivery times, allowing a reasonable variance in review time and the possibility of revisions and resubmission.

Paragraph 3.13; ADD the following subparagraph:

3.13.2 The Contractor shall assume responsibility for all of its construction activities on the site. All employees, subcontractors, sub-subcontractors, and material suppliers of the Contractor shall be bound by the directions of the Contractor pertaining to disposition of materials and equipment on the site and precautions necessary for protection of life and property. The Contractor shall be responsible for and shall maintain continuous access to the work for use by all contractors, employees, subcontractors, sub-subcontractors, and material suppliers.

Paragraph 3.14; ADD the following subparagraph:

3.14.3 No contractor shall cut structural members except with written permission of the Owner and Architect.

Paragraph 3.15.1; ADD the following to the end of the paragraph:

3.15.1 The Contractor shall, on a daily basis, police and keep clean the site and surrounding areas of the project of his materials, rubbish, tools, construction equipment, machinery, or any materials to be stored thereon, either temporarily or permanently.

Paragraph 3.18.1; DELETE paragraph 3.18.1, and replace in lieu thereof the following NEW paragraph:

3.18.1 To the fullest extent permitted by law, and to the extent claims, damages, losses or expenses are not covered by Project Management Protective Liability insurance purchased by the Contractor in accordance with Section 11.3, the Contractor shall indemnify, protect, defend and hold harmless the Owner, 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 caused in whole or in part by acts or omissions of the Contractor, a Subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, regardless of whether or not such claim damage, loss or expense is
Paragraph 3.18: ADD the following subparagraphs:

3.18.3 The obligations of the Contractor under this section 3.18 shall not extend to the liability of the Architect, their consultants, and agents and employees of any of them arising out of (1) the preparation or approval of maps, drawings, opinions, reports, surveys, change orders, designs or specifications, or (2) the giving of, or the failure to give, direction or instructions by the architect, their consultants, and agents and employees of any of them provided such giving or failure to give is the primary cause of the injury or damage and provided that the giving of such instructions is usual and customary as otherwise herein defined.

3.18.4 The Contractor agrees to perform the Work in a safe and proper manner and comply with all laws and Ordinances referring to such Work, and to indemnify and save the Owner, his respective agents, consultants, servants, and employees(hereinafter the “Indemnities). Such indemnity, as used in this Article, includes the defense of claims, made against the Indemnities and all penalties for violation of the same.

3.18.5 The purchase of insurance by the Contractor shall in no event be construed as a fulfillment or discharge of the obligations set forth in this section.

3.18.6 To the fullest extent permitted by Law, the Contractor shall properly guard its Work and areas affected from being injured by it or by the condition of the Project Site, and shall in all respects comply with any and all provisions of the law and local ordinances relating to the maintenance of danger signals, barriers, lights, and similar safeguards respecting falling materials and in and about all excavations, protruding nails, hoists, openings, scaffolding, stairways and similar safeguards respecting falling materials and in and about all excavations, protruding nails, hoists, openings, scaffolding, stairways and other parts of the work and adjacent area where the same are required. The Contractor agrees to indemnify, defend and save harmless the Indemnities against loss and expense by reason of liability imposed by law upon the Indemnities for damages because of bodily injuries including death at any time resulting therefrom , sustained by any person or persons other than employees of the Contractor, whether or not the Indemnities are negligent in such event.

3.18.7 To the fullest extent permitted by law, the Contractor shall agree to indemnify, defend and save harmless the Indemnities against loss and expense by reason of the liability imposed by law upon the Indemnities for damages because of bodily injuries, including death at any time resulting therefrom, sustained by any employee of the Contractor while at the site where Work under this Contract is conducted, or elsewhere, while engaged in the performance of Work under this contract. The Contractor will not indemnify the Indemnities’ sole or concurrent negligence, whether attributable to a breach of statutory duty, or administration regulation, or otherwise.

3.18.8 The Contractor agrees to indemnify and hold the Indemnities harmless by reason of any liens, claims, demands or other liabilities, which may be asserted against the Indemnities by any other independent Contractor on the Project, and which arise out of any act or omission of the Contractor.

3.18.9 In the event of any such liability, loss, expense, damage or injury, or if any claim or demand for damage is made against the Indemnities, the Owner may withhold from any payment due or thereafter to become due to the Contractor under the terms of this Contract, an amount sufficient in its judgment to protect and indemnify Indemnities for any and all such claims ,liability expense, loss, damage or injury; or the Owner, in its sole decision may require the Contractor to furnish a surety bond satisfactory to the Owner, guaranteeing such protection, which bond shall be furnished by the Contractor within five (5) days after written demand had been made thereafter.

3.18.10 The indemnification obligation of the Contractor under this Article 3 shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefit payable by or
for the Contractor or any Subcontractor under Workman’s Compensation Acts, Disability Benefits Acts or other employee benefits Acts.

3.18.11 The Owner will obtain and pay for, if necessary, the general building permit, post applicable utility bonds and pay access fees and right of way fees. The Contractor will arrange and pay for the cost of all other “trade” permits, approvals and inspections. The Contractor will be responsible for notifying all agencies to schedule inspections or approvals, whether permits or fees are in the Contractor’s or the Owner’s responsibility.

3.18.12 Contractor shall not place any signs, billboards or poster on any portion of the project site, building property or fences (temporary or permanent) surrounding the same, unless prior written permission has been received from the Owner, and then only of a size, material, color and type and a location approved by the Owner.

3.18.13 The Contractor shall be responsible for implementing safety programs for his own forces in accordance with Federal, State, and local requirements. In addition to other indemnities contained herein the Contractor agrees to indemnify and hold harmless against any and all damages, claims and losses, the Owner, and/or Architect from any and all damages, claims and losses made as a result of Contractor’s failure to abide by this provision, the Contract and for any and all safety and health (including but not limited to OSHA, MOSH, and VOSH) claims or violations that are alleged or brought. Said indemnification shall include but not be limited to Owner’s, and/or Architect’s attorney’s fees and costs.

Paragraph 4.2.12; DELETE the following:

4.2.12 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 so rendered in good faith.

Paragraph 4.2.13; DELETE paragraph 4.2.13, and replace in lieu thereof the following NEW paragraph:

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 and acceptable to the Owner.

Paragraph 4.3.1; ADD the following to the end of the paragraph:

4.3.1 Written notice shall be on Contractor’s stationary; meeting minutes and facsimile transmission will not be considered written notice.

Paragraph 4.3.2; ADD the following to the beginning of the first sentence:

4.3.2 Except as indicated in 4.3.7,

Paragraph 4.3.3; DELETE paragraph 4.3.3, and replace in lieu thereof the following NEW paragraph:

4.3.3 Continuing Contract Performance. Pending final resolution of a Claim, unless otherwise agreed in writing the Contractor shall proceed diligently with performance of the Contract and the Owner shall continue to make payments in accordance with the Contract Documents except the Owner may withhold payment to an extent reasonably necessary to secure or compensate for a claim.

Paragraph 4.3.7.1; DELETE paragraph 4.3.7.1, and replace in lieu thereof the following NEW paragraph:

4.3.7.1 If the Contractor wishes to make Claim for an increase in the Contract Time, written notice shall be made in writing to the Owner and Architect not more than ten (10) days after the commencement of the delay, otherwise shall be waived. The Contractor’s Claim shall include an estimate of cost and of probable effect of delay on progress of the Work. In the case of a continuing delay only one Claim is necessary.
Paragraph 4.3.7.; ADD the following paragraph:

4.3.7.3.

It has been determined that the following table will be used to determine allowable non-compensable time extensions to the contract for “unusually severe weather” at the construction site based on a five (5) day work week.

<table>
<thead>
<tr>
<th>Month</th>
<th>No. of work day delays that may be expected to occur under normal weather conditions.</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>7</td>
</tr>
<tr>
<td>February</td>
<td>7</td>
</tr>
<tr>
<td>March</td>
<td>5</td>
</tr>
<tr>
<td>April</td>
<td>4</td>
</tr>
<tr>
<td>May</td>
<td>3</td>
</tr>
<tr>
<td>June</td>
<td>3</td>
</tr>
<tr>
<td>July</td>
<td>3</td>
</tr>
<tr>
<td>August</td>
<td>3</td>
</tr>
<tr>
<td>September</td>
<td>3</td>
</tr>
<tr>
<td>October</td>
<td>4</td>
</tr>
<tr>
<td>November</td>
<td>4</td>
</tr>
<tr>
<td>December</td>
<td>4</td>
</tr>
</tbody>
</table>

Actual adverse weather delay days must prevent work on critical activities for 50 percent or more of the contractor’s scheduled work day. The number of actual adverse weather delay days shall include days impacted by actual adverse weather (even if adverse weather occurred in previous month), be calculated chronologically from the first to the last day of each month, and be recorded as full days. If the number of actual adverse weather delay days exceeds the number of days anticipated as listed above, the Contractor shall be entitled to additional Contract time.

Paragraph 4.5; DELETE in its entirety

Paragraph 4.6; DELETE in its entirety

Paragraph 5.2.1; REVISE the first sentence in paragraph 5.2.1 to read as follows:

5.2.1. Unless otherwise stated in the Contract Documents or the bidding requirements, the Contractor, as soon as practicable after award of the Contract, but no later than 48 hours after requested by the Owner, shall furnish in writing to the Owner the names of persons or entities...

Paragraph 5.2.4; DELETE paragraph 5.2.4, and replace in lieu thereof the following NEW paragraph:

5.2.4. The Contractor shall not change a Subcontractor, person or entity previously selected without approval of Owner.

Paragraph 5.2; ADD the following subparagraphs:

5.2.5. If the Contractor fails to submit names of persons or entities to whom the Owner and Architect has no reasonable objection within a reasonable amount of time, the Contract may be terminated by the Owner.

5.2.6. The Contractor shall not be entitled to progress payments prior to approval of the persons or entities as provided in Subparagraph 5.2.1.

Paragraph 5.3.1; REVISE the first sentence as follows:

5.3.1. “By appropriate agreement” to “By an appropriate written agreement”
Paragraph 5.4.1; DELETE Item No. 1, and replace in lieu thereof the following NEW Item No. 1:

5.4.1 1. assignment is effective only after termination of the Contract by the Owner for cause pursuant to Section 14.2 or stoppage of the Work pursuant to Subparagraph 2.3 and only for those subcontract agreements which the Owner accepts by notifying the Subcontractor in writing; and

Paragraph 5.4.2; DELETE in its entirety.

Paragraph 6.1.4; DELETE in its entirety.

Paragraph 6.2.4; DELETE paragraph 6.2.4, and replace in lieu thereof the following NEW paragraph:

6.2.4 The Contractor shall promptly remedy damage caused by the Contractor to completed construction or partially completed construction or to property of the Owner or other Contractors as provided in Section 10.2.5.

ADD the following subparagraphs:

6.2.6 Should the Contractor be caused damage by another Contractor, no action will lie against the Owner and the Owner shall have no liabilities therefore, but the Contractor may assert his claim for damages against such other Contractor as the third party beneficiary under the Contract between such other Contractor and the Owner. Should such other Contractor make a claim against the Owner or Architect on account of damages alleged to have been so sustained, such the Contractor agrees that he will hold the Owner or Architect harmless against any such claim or suit and the he will reimburse to the Owner or Architect as the case maybe, the cost of defending such suit, including reasonable attorney’s fees, and if any judgment against the Owner or Architect arises therefrom the Contractor shall pay or satisfy it and shall pay all costs incurred by the Owner or Architect.

6.2.7 Upon entering the project, locate all general reference points provided, and take such action as necessary to prevent their destruction.

6.2.8 Under the work of each Contractor, subcontractor, and all personnel, layout work and be responsible for all lines, levels, elevations, and measurements from points provided. Exercise proper precautions to verify conditions indicated in the Contract Documents and be responsible for any error resulting from failure to exercise such precaution.

Paragraph 7.1.2; DELETE paragraph 7.1.2, and replace in lieu thereof the following NEW paragraph:

7.1.2 A Change Order shall not release the Contractor of obligations under the contract and 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.

Paragraph 7.1; ADD the following subparagraph:

7.1.4 Except in any emergency which might endanger life or property, no extra work or charge shall be made unless a written change order from the Owner and/or Architect has been received by the Contractor.

Paragraph 7.3.2; DELETE paragraph 7.3.2, and replace in lieu thereof the following NEW paragraph:

7.3.2 A Construction Change Directive shall be used in the absence of total agreement on the terms of a Change Order or in the event that full execution of a Change Order may cause undo delay to the work.
Paragraph 7.3.5; ADD the following to the end of the paragraph:

Failure of the Contractor to advise the Architect of any disagreement with the Construction Change Directive within a reasonable period, and prior to the commencement of the change in the work involved, will constitute the Contractor’s agreement to the terms provided in the Construction Change Directive.

Paragraph 7.3.6, DELETE paragraph 7.3.6, and replace in lieu thereof the following NEW paragraph:

"If the Contractor does not respond promptly or disagrees with the method for adjustment in Contract Sum, the method and the adjustment shall be determined by the Architect on the basis of reasonable expenditures and savings of those performing the Work attributable to the change, including an allowance for overhead and profit in accordance with the schedule set forth in Paragraph 7.3.6 below. In such case, and also under Clause 7.3.3.3, the Contractor shall keep and present, in such form as 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 7.3.6 shall be limited to the following:

All Change Orders shall be subject to the following format for itemization of the costs:

1. Attach an itemization of labor hours. A certified payroll affidavit may be required to substantiate labor rates. The cost of foreman and superintendents may be added only when the change order makes necessary the hiring of additional supervisory personnel or makes their employment for time in addition to that required by the basic contract, or if the foreman or superintendent participates in the actual work of the Change Order.
2. Labor burden percentage costs shall include all fringes, taxes, insurance, liabilities, workmen’s compensation and unemployment. Labor burden percentage rates are subject to approval of the Owner and are not subject to profit and overhead.
3. Attach an itemization of all materials used listing unit prices and extended prices.
4. Attach an itemization of equipment used and rental rates. If equipment is a rental, attach copy of rental invoice. Rental equipment and contractor-owner equipment costs shall include all costs associated with the equipment, i.e. transportation, set-up, gas and oil. Rental rates shall not exceed rates established by local rental companies and “MEANS DATA” rates.
5. Profit and overhead shall be considered full reimbursement for any additional expenses caused by the change order work. The Contractor shall agree to profit and overhead markup on work by his own forces as outlined in paragraph 10 below. These allowances for overhead and profit include among other costs; maintenance and/or operations of Contractor’s regular established office, branch office, and other facilities; resident and / or non-actively engaged supervision; time keepers; clerks; stenographers; watchmen; cost of correspondence; increased item of warranty under the change.
6. The cost of the bond is not included in allowable markups.
7. A Change Order request shall not be considered unless submitted with all required and requested supporting documentation. All parties to the change shall use the Change Order Format.
8. For all work to be performed by Subcontractor/Subcontractors, the Contractor shall furnish the Subcontractors’ itemized proposal which shall contain original signatures by an authorized representative of the Subcontracting firm. If requested by the Owner or Architect, proposals from suppliers or other supporting data to substantiate the Contractor’s or Subcontractor’s cost shall be furnished.
9. Change Order costs shall not exceed unit pricing as provided in the Contract Documents.
10. Unless otherwise specified, the allowable markup for combined overhead and profit, for work performed by the Contractor with his own forces will be based on the monetary value of the work in accordance with the following schedule:

<table>
<thead>
<tr>
<th>Value of work</th>
<th>Combined Overhead and Profit</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0 - $1,000</td>
<td>15%</td>
</tr>
<tr>
<td>$1,001 - $5,000</td>
<td>10%</td>
</tr>
<tr>
<td>$5,001 - $10,000</td>
<td>7%</td>
</tr>
<tr>
<td>$10,001 - $25,000</td>
<td>5%</td>
</tr>
<tr>
<td>Over $25,000</td>
<td>negotiated, but not more than 5%</td>
</tr>
</tbody>
</table>
11. For extra work performed by a Subcontractor with his own organization, the percentages for combined overhead and profit will be as outlined above. On the work partly or solely performed by a Subcontractor, the Contractor will be allowed five percent (5%) of total costs of the Subcontractor’s labor, materials, overhead and profit only. Only one markup for combined overhead and profit by a Subcontractor will be permitted.

12. The Contractor shall submit all Change Orders on Washington County Public Schools Change Order Request Form attached in Contract Documents.”

Paragraph 7.3.8; DELETE in its entirety.

Paragraph 7.4.1; DELETE paragraph 7.4.1, and replace in lieu thereof the following NEW paragraph:

7.4.1 The Architect with concurrence of the Owner will have authority to order minor changes in the Work not involving adjustment in the Contract Sum or extension of the Contract Time and not inconsistent with the intent of the purposes of the building and the Contract Documents. Such changes shall be effected by written order and shall be binding on the Owner and Contractor. The Contractor shall carry out such written orders promptly.

Paragraph 8.1.2; DELETE paragraph 8.1.2, and replace in lieu thereof the following NEW paragraph:

8.1.2 The date of commencement of the Work is the date established in the Notice to Proceed. If there is no Notice to Proceed it shall be such other date as may be established in the Owner-Contractor Agreement or elsewhere in the Contract Documents. The date shall not be postponed by the failure to act of the Contractor or of persons or entities for whom the Contractor is responsible.

Paragraph 8.1.3; DELETE paragraph 8.1.3, and replace in lieu thereof the following NEW paragraph:

8.1.3 The date of Substantial Completion is the date certified by the Architect in accordance with Section 9.8 or when the required certificate of use or occupancy has been received by the Owner, whichever is later.

Paragraph 8.2.2; DELETE the following:

8.2.2 “to permit the timely filing of mortgages, mechanic’s liens and other security interests.”

Paragraph 8.2; ADD the following Subparagraph:

8.2.4 Should the progress of the Work be delayed by any fault, neglect, act, or omission of the Contractor or any person or firm employed by him or should it be necessary to complete the work within the time permitted for the Contractor’s work, the Contractor shall, at his own expense, work such overtime as may be necessary to make up for all lost time and to avoid delay in completion of the Work. The Contractor shall compensate the Owner for and hold him harmless against any and all cost, expense, losses, liability, and damages which the Owner may sustain or incur by reason of such delay.

Paragraph 8.3.1; DELETE paragraph 8.3.1, and replace in lieu thereof the following NEW paragraph:

8.3.1 Requests for extension of completion time due to conditions over which the Contractor has no control or its subcontractors and suppliers have no control will be reviewed by the Owner after written application is made to the Owner and Architect for a time extension, with reasons stated clearly, and detailed proof given for all delays beyond the Contractor’s or its subcontractors and suppliers control. No time extension will be allowed except by written and specific approval of the Owner. Delays beyond the Contractor’s or its subcontractors and suppliers control may include: an act or neglect of the Owner’s own forces, Architect, or of an employee of either, or of a separate contractor employed by the Owner, or by changes ordered in the Work, or by labor disputes, fire, unusual delay in deliveries, unavoidable casualties or other causes beyond the Contractor’s or its subcontractors and suppliers control or by other causes which the Owner and Architect determine may justify delay, then the Contract Time shall be extended by Change Order. Extension of time shall be Contractor’s sole remedy for delays unless the same shall have been caused by acts constituting intentional interference by the Owner with Contractor’s performance
of the work where and to the extent such acts continue after Contractor’s notice to Owner of such interference. Owner’s exercise of any of its rights under Article 7, Changes in the work, or subparagraph 3.13.3, regardless of the extent or number of such changes, or Owner’s exercise of any of its remedies of suspension of the work, or requirement of correction or re-execution of any defective work, shall not under any circumstances, constitute intentional interference with Contractor’s performance of the work. No claim for extension of time shall be made or entertained on the basis of rejection of work in place, shop drawings, or samples or for non conformance with the Contract Documents."

Paragraph 9.3.2, DELETE paragraph 9.3.2, and replace in lieu thereof the following NEW paragraph:

9.3.2 Unless previously approved by Owner, payments shall not be made on account of materials and equipment delivered and suitably stored at the site for subsequent incorporation in the Work. Similarly, unless previously approved by the Owner, payments shall not be made for materials and/or equipment stored off the site. Payment for materials and equipment stored on or off the site shall be conditioned upon compliance by the Contractor with procedures satisfactory to the Owner to establish the Owner’s title to such materials and equipment or otherwise protect the Owner’s interest, and shall include applicable insurance, storage and transportation to the site for such materials and equipment stored off the site.”

Paragraph 9.3.3; ADD the following:

9.3.3 Nothing contained herein diminishes the responsibility of the Contractor to replace stolen, defective, or vandalized work, materials or equipment.

Paragraph 9.4; ADD the following subparagraph:

9.4.3 Retainage in the amount of ten (10%) percent shall be withheld with each application for payment until Substantial Completion. If the Contractor has shown earnest progress and prompt payment of subcontractors during the first half of the construction billing period, he may in writing to the Owner/Architect request that no further retainage be withheld. The Owner/Architect will review the request and respond in writing within 14 calendar days of the receipt of the request of their decision.

9.4.4 In any event where the Architect, with cause, does not certify payment or withholds certification to any extent, the Contractor shall nonetheless continue to fully perform the work.

Paragraph 9.5.1; ADD the following item:

9.5.1 mechanic’s lien notice or action filed, or reasonable evidence indicating probable filing of each notice or action.

Paragraph 9.6.1; ADD the following to the end of the paragraph:

9.6.1 Progress payments shall not be due until the following conditions have been achieved: (A) The Contractor has submitted a sworn Application for Payment in an Owner’s approved format showing all money paid out and costs incurred to the date of Application for Payment; (B) The Contractor has submitted unconditional lien waiver on a form acceptable to the Owner, establishing the total amount of payments to date and conditional lien waivers for the amount of payments to date and conditional lien waivers for the amount of the current request for all Subcontractors and Supplies.

Paragraph 9.7.1; DELETE paragraph 9.7.1, and replace in lieu thereof the following NEW paragraph s:

9.7.1 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, then the Contractor may, upon fifteen (15) additional days’ written 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 shut-down, delay, and start-up, plus interest as provided for in the Contract Documents.”
Paragraph 9.8.1; ADD the following to the end of the paragraph:
9.8.1 Substantial Completion shall include receipt and all warranties and approval of all O&M Manuals, demonstrations and training as required by the Contract Documents.

Paragraph 9.8; ADD the following subparagraph:
9.8.6 When the Architect and Owner agree that the project has reached “Substantial Completion” as set forth in paragraph 8.1.3, is on schedule, and it appears that there are no complications, problems in completing the job, the retainage may be reduced to five percent (5%) at the Owner’s discretion.

Paragraph 9.9.1; DELETE paragraph 9.9.1, and replace in lieu thereof the following NEW paragraph:
9.9.1 The Owner may occupy or use any completed or partially completed portion of the Work at any stage.

Paragraph 9.10.2, DELETE paragraph 9.10.2, and replace in lieu thereof the following NEW paragraph:
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’s property might be responsible or encumbered (less amounts withheld by the Owner) have been paid or otherwise satisfied, (2) a certificate evidencing that insurance required by the Contract Documents to remain in force after final payment is currently in effect and will not be canceled or allowed to expire until at least 30 days’ prior written notice has been given to the Owner, (3) a written statement that the Contractor knows of no substantial reason that the insurance will not be renewable to cover the period required by the Contract Documents, (4) consent of surety, if any, to final payment with AIA Form and (5) if required by the Owner, other data establishing payment or satisfaction of obligations, such as receipts, releases and waivers of liens, claims, security interests or encumbrances arising out of the Contract, to the extent and in such form as may be designated by the Owner and Release of Liens on the “Contractor’s Affidavit of Release of Liens and Payments of Debts and Claims” AIA Form: (6) all records, drawings and specifications, addenda, change orders, and other modifications maintained at the site under the subparagraph 3.11.1 all warranties, instruction and maintenance manuals required. If a Subcontractor refuses to furnish a release or waiver required by the Owner, the Contractor may furnish a bond satisfactory to the Owner to indemnify the Owner against such lien. If such lien remains unsatisfied after payments are made, the Contractor shall refund to the Owner all money that the Owner may be compelled to pay in discharging such lien, including all costs and reasonable attorneys’ fees. Final payment to the Contractor shall not become due until all close-out documents have been properly submitted to and certified by the Architect, and delivered by the Architect to the Owner.

Paragraph 9.10.4; ADD the following item:
9.10.4.4 faulty or defective Work appearing after Substantial Completion.

Paragraph 9.10; ADD the following Subparagraph:
9.10.6 Final payment constituting the entire unpaid balance of the Contract Sum shall be paid by the Owner to the Contractor not later than sixty (60) days after the work has been completed and accepted by the Owner, and the Architect, in accordance with all other provisions of 9.10.

Paragraph 10.1.1; DELETE paragraph 10.1.1, and replace in lieu thereof the following NEW paragraph:
10.1.1 The Contractor shall solely be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the performance of the Contract. The Contractor shall submit the Contractor’s safety program to the Owner. It is expressly understood and agreed that the Owner, the Architect, and his Project Representative are not in charge of the Work or in control thereof. Any provisions in the Contract Documents in conflict with this Article shall be null and void.
Paragraph 10.2.6; ADD the following:

10.2.6 This person, or approved alternate person, shall be on site at all times while personnel for whom they are responsible are on site. This person will be fully responsible for implementing and enforcing a program amongst his company’s employees, that ensures their safety and the safety of others affected by their work, and that is in full compliance with governing agencies including the Occupational Safety and Health Administration.

Paragraph 10.2.7; DELETE paragraph 10.2.7, and replace in lieu thereof the following NEW paragraph:

10.2.7 The Contractor shall not load or permit any part of the construction or site to be loaded so as to endanger its safety or the safety of persons or property and the Contractor shall protect adjoining properties, streets, walkways, sidewalks, and paths so as to protect the safety of persons or property using such adjoining properties, walkways, sidewalks and paths.

Paragraph 10.2; ADD the following subparagraphs:

10.2.8 The Contractor shall maintain an updated materials data sheet for materials being used by Contractor of the Work. A copy of the list must be kept on site by the Contractor in a readily accessible area. Under no circumstances will the storage of hazardous materials unnecessary for completion of the Work to be allowed on site. It is the Contractor’s responsibility to promptly remove all stored hazardous materials from the site upon completion of the Work for which it is intended.

10.2.9 The Contractor shall protect excavations and structures from damage by rain, water, ground water, or water from any other source.

10.2.10 The Contractor shall provide constant protection to maintain work, materials, apparatus and fixtures free from injury and damage by rain, snow, wind, storms, frost, or heat and normal constructions operations and shall protect work as necessary or at the end of each day’s work.

10.2.11 The Contractor shall remove work damaged due to failure to provide specified protection and replace the work at no additional cost to the Owner.

Paragraph 10.3; ADD the following subparagraph:

10.3.1.1 In the event the Contractor encounters on the site material reasonably believed to be asbestos or polychlorinated biphenyl (PCB) which has not been rendered harmless, the Contractor shall immediately stop Work in the area affected and report the condition to the Owner and Architect in writing. The Work in the affected area shall not thereafter be resumed except by written agreement of the Owner and Contractor if in fact the material is asbestos or polychlorinated biphenyl (PCB) and has not been rendered harmless. The Work in the affected area shall be resumed in the absence of asbestos or polychlorinated biphenyl (PCB), or when it has been rendered harmless, by written agreement of the Owner and Contractor, or in accordance with final determination by the Architect.

Paragraph 10.3.3; ADD the following:

10.3.3 Failure of Contractor to stop work upon encountering asbestos or PCB per Subparagraph 10.3.1 shall relieve the Owner of responsibility for any losses by the Contractor attributable to these materials.

Paragraph 10.6.1; DELETE paragraph 10.6.1, and replace in lieu thereof the following NEW paragraph:

10.6.1 In any case of an emergency, the Contractor shall immediately respond in accordance with the Contractor’s safety plan and notify the Architect and Owner by the most expeditious means available, written notice explaining the situation and actions taken.

Paragraph 10.6; ADD the following subparagraph:

10.6.2 Additional compensation or extension of time will not be considered or permitted for emergencies arising from delay, damage, or loss as stipulated in 8.2.4 and 10.2.5 or other applicable provisions.
Paragraph 11.1; REVISE the paragraphs as follows:

11.1 General Insurance Requirements

11.1.1 The Contractor shall require all Subcontractors to maintain during the term of the Contract commercial general liability insurance, business auto liability insurance, workers compensation insurance, employers liability insurance, and umbrella excess liability insurance to the same extent required of the Contractor. The Contractor shall furnish Subcontractors’ certificates of insurance to the Owner immediately upon request.

11.1.2 All insurance policies required hereunder shall be endorsed to provide that policy is not subject to cancellation, non-renewal or material reduction coverage until sixty (60) days prior written notice has been given to the Owner.

11.1.3 All required insurance coverages must be underwritten by insurers allowed to do business in the State of Maryland and acceptable to the Owner. The insurers must also have a policy holders’ rating of “A-“ or better, and a financial size of “Class VII” or better in the latest evaluation by A.M. Best Company, unless Owner grants specific approval for an exception.

11.2 Insurance Limits

11.2.1 The Contractor shall purchase and maintain the following insurance coverages on an “occurrence” basis which shall be written for not less than the limits specified below or required by law, whichever is greater.

11.2.1.1 Commercial general liability insurance or its equivalent for bodily injury, personal injury and property damage including loss of use, with minimum limits of:

- $1,000,000 each occurrence;
- $1,000,000 personal and advertising injury;
- $2,000,000 general aggregate; and
- $2,000,000 projects/completed operations aggregate

This insurance shall include coverage for all of the following:

i. General aggregate limit applying on a per project basis;
ii. Liability arising from premises and operations;
iii. Liability arising from actions of independent contractors;
iv. Liability arising from products and completed operations with such coverage to be maintained for two years after completion of Work;
v. Contractual liability including protection for contractor from bodily injury and property damage claims arising out of liability assumed under this Contract; and
vi. Liability arising from the explosion, collapse, or underground (XCU) hazards.

11.2.1.2 Business auto liability insurance or its equivalent with a minimum limit of $1,000,000 per accident and including coverage for all of the following:

i. Liability arising out of ownership, maintenance or use of any auto (or hired and non-owned autos only if no owned autos); and
ii. Auto contractual liability.

11.2.1.3 Workers compensation insurance or its equivalent with statutory benefits as required by any state or Federal law, including standard “other states” coverage; employers liability insurance or its equivalent with minimum limits of:

- $100,000 each accident for bodily injury by accident;
- $100,000 each employee for bodily injury by disease; and
- $500,000 policy limit for bodily injury by disease.
11.1.2.1.4 Umbrella excess liability or excess liability insurance or its equivalent with minimum limits of:
   - $5,000,000 per occurrence;
   - $5,000,000 aggregate for other than products/completed operations and auto liability; and
   - $5,000,000 products/completed operations aggregate
And including all of the following coverages on the applicable schedule of underlying insurance:
   i. Commercial general liability
   ii. Business auto liability; and
   iii. Employers’ liability.

11.1.2.1.5 The elected and appointed officials, officers, consultants, agents and employees and authorized volunteers of the Washington County Board of Education shall be named as additional insureds on the Contractor’s commercial general liability insurance and umbrella excess or excess liability insurance policies with respect to liability arising out of the Contractors projects, installation, and/or services provided under this Contract. Such coverage shall extend to cover the additional insured(s) for liability arising out of the following:
   i. On-going operations; and
   ii. Projects and completed operations
The commercial general liability policy and the umbrella excess liability or excess liability policies, if required herein, must include additional insured language, which shall afford liability coverage for the exposures listed above in i. and ii.

11.1.2.1.6 The certificate of insurance must be provided to the Purchasing Department of WCPS, Hagerstown, MD prior to commencement of the Contract.

Paragraph 11.2.1; REVISE the paragraph as follows:
11.2.1 WCPS will not provide Builder’s Risk protection as it does not apply.

Paragraph 11.4.1, REVISE the paragraph as follows:
11.4.1 The Owner will effect and maintain “All Risk” insurance for physical loss or vandalism and malicious mischief perils subject to a deductible of $1,000 per occurrence upon all structures and appurtenances thereto on which the Work of the Contract is to be done to the full insurable value thereof, including materials in place or to be used as part of the permanent construction. Coverage shall protect the Owner, the Contractor and Subcontractor as interests may appear.
The Owner does not maintain insurance of any kind on tools, equipment, temporary offices, sheds, shacks, and other property of the Contractor or his employees, no materials or supplies stored on site or away from the job site. It shall be the complete responsibility of the Contractor to provide for his own protection and that of his employees against any losses of such tools, equipment, and other property and materials.

Paragraph 11.4.1.2; DELETE in its entirety.

Paragraph 11.4.2; REVISE the paragraph as follows:
11.4.2 WCPS will not provide boiler and machinery insurance as it does not apply.
Paragraph 11.4.9; REVISE the paragraph as follows:

11.4.9 If required in writing by a party in interest, the Owner as fiduciary shall, upon occurrence of an insured loss, give bond for proper performance of the Owner’s duties. The cost of required bonds shall be charged against proceeds received as fiduciary. The Owner shall deposit in a separate account proceeds so received, which the Owner shall distribute in accordance with such agreement as the parties in interest may reach. If after such loss no other special agreement is made, replacement of damaged property shall be covered by appropriate Change Order.

Paragraph 11.4.10; REVISE the paragraph as follows:

11.4.10 The Owner as fiduciary shall have power to adjust and settle a loss with insurers unless one of the parties in interest shall object in writing five days after occurrence of loss to the Owner’s exercise of this power.

Paragraph 11.5.1; REVISE the paragraph as follows:

11.5.1 Unless waived by the Owner in writing, the Contractor shall furnish a Performance Bond and Labor and Material Payment Bond covering the faithful performance of the Contract and the payment of all obligations arising thereunder and complying with the requirements of Maryland law. Both Bonds shall be in the amount of one hundred percent (100%) of the contract amount and shall name the Owner as Obligee. Firms issuing bonds must be licensed to write bonds in the State of Maryland. The Contractor shall pay premiums for required bonds. Obtaining of bonds by Contractor shall be a condition precedent to effectuation of the Contract between the Owner and Contractor. If additional work is authorized the amounts of the bonds shall be increased to cover the value of the increased Contract sum. All bonds shall confirm to the requirements of the Maryland Little Miller Act.

Paragraph 12.1.1; REVISE the paragraph as follows:

12.1.1 If any portion of the Work is covered contrary to the request of the Architect or to the requirements specifically expressed in the Contract Documents, it must, if required in writing by either, the Architect, Owner, or any other governmental agency be uncovered for their observation and be replaced at the Contractor’s expense without change in the Contract Time.

Paragraph 12.2.1; REVISE the paragraph as follows:

12.2.1 The Contractor shall promptly correct Work rejected by the Architect or failing to conform to the requirements of the Contract Documents, whether observed before or after Substantial Completion and whether or not fabricated, installed or completed. The Contractor shall bear costs of correcting such rejected Work, including additional testing and inspections and compensation for the Architect’s, the Owner’s, or any governmental agency’s services and expenses made necessary thereby.

Paragraph 12.2.1; ADD the following subparagraphs:

12.2.1.1 Defective work shall include by not be limited to Work which may be caused by deterioration or failure to perform due to: premature wear (not occasioned by abuse); or inherent defects in materials workmanship of manufacturer, or fabrication; or improper execution of work.

12.2.1.2 Cost of correcting such related work also includes all contingent damages arising therefrom, including damages to the work (whether installed by the Contractor or another) and to other property of the Owner.

12.2.1.3 Such warranties as provided herein do not deprive the Owner of the Owner’s right to prosecute any claim for breach of contract.

12.2.1.4 Any defective or nonconforming work during this period, causing hazard to life, safety, property, or use causing the Owner a financial loss shall be corrected immediately without regard to normal working hours. The Owner will immediately endeavor to make telephone notice to the Contractor on the next working day.
12.2.1.5 The Owner shall direct, if endeavors to contact the Contractor fail, certain telephone notification to Subcontractors in order to expedite emergency repairs. The Contractor shall not be relieved of this responsibility and shall supervise and direct correction of defects as required by the Contract Documents.

12.2.1.6 The manufacturer of a product may be specifically mentioned as a party to a warranty. Then, in such cases, it shall be the Contractor’s obligation to produce the required warranty of the manufacturer and submit it to the Architect for examination and approval. Inclusion of a manufacturer as a party to a warranty does not relieve the Contractor from the requirements of the Contract Documents.

12.2.1.7 Warranties on operating systems, equipment, or components placed in operation prior to Substantial Completion or acceptance shall begin on the date of Substantial Completion.

Paragraph 12.2.2.1; REVISE the paragraph as follows:

12.2.2.1 In addition to the Contractor’s obligations under Section 3.5, if, within two years after the date of Substantial Completion of the Work or designated portion thereof or after the date for commencement of warranties established under Section 9.9.1, or by terms of an applicable special warranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, the Contractor shall correct it promptly after receipt of written notice from the Owner to do so unless the Owner has previously given the Contractor a written acceptance of such condition. The Owner shall give such notice promptly after discovery of the condition. During the two-year period for correction of Work, if the Owner fails to notify the correction by the Contractor and give the Contractor an opportunity to make the correction, the Owner waives the rights to require correction by the Contractor and to make a claim for breach of warranty. If the Contractor fails to correct nonconforming Work within a reasonable time during that period after receipt of notice from the Owner or Architect, the Owner may correct it in accordance with Section 2.4.

Paragraph 12.2.2.2; REVISE the paragraph as follows:

12.2.2.2 The two-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 performance of the Work.

Paragraph 12.2.2.3; REVISE the paragraph as follows:

12.2.2.3 The two-year period for correction of Work shall not be extended by corrective Work performed by the Contractor pursuant to this Section 12.2.

Paragraph 12.2.4; REVISE the paragraph as follows:

12.2.4 The Contractor shall bear the cost of correcting destroyed or damaged construction, whether completed or partially completed, of the Owner or other Contractors caused by the Contractor’s correction or removal of Work which is not in accordance with the requirements of the Contract Documents, including attorneys’ fees and expenses.

Paragraph 12.2.5; REVISE the paragraph as follows:

12.2.5 Nothing contained in this Section 12.2 shall be construed to establish a period of limitation with respect to other obligations which the Contractor might have under the Contract Documents. Establishment of the two-year period for the 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.
Paragraph 12.2; ADD the following subparagraph:

12.2.6 Inspection, failure to inspect, or approval or acceptance of any part of the Work, or any payment on account thereof, shall not in any way limit the right to reject materials or equipment later found by the Architect, the Owner, or any Governmental Agency to be defective or not in accordance with requirements of the Contract Documents.

Paragraph 13.3; ADD the following subparagraph:

13.3.2 All proposals, approvals, instructions, requests, claims, demands and other notices shall be made in writing on Contractor’s stationary; meeting minutes and facsimile transmission will not be considered written notice.

Paragraph 13.4.2; REVISE the paragraph as follows:

13.4.2 No consent or waiver, expressed or implied, by either party to this agreement to or of any breach or default by the other in performance of any obligations hereunder shall be deemed or construed to be a consent or waiver to or of any other breach or default by such party hereunder. Failure on the part of any party hereto to complain of any act or failure to act of the other party or to declare the other party in default hereunder, irrespective of how long such failure continues, shall not constitute a waiver of the rights of such party hereunder. Inspection by, payment by, or tentative approval or acceptance by the Owner or the failure by Owner to perform any inspection hereunder, shall not constitute final acceptance of the work or any part thereof, and shall not release Contractor from any of its obligations hereunder.

Paragraph 13.4: ADD the following subparagraph:

13.4.3 The Contractor is subject to liquidated damages in the amount set forth on the bid form specification for delay of the date established in the Contract Documents for substantial completion, when such delay has been determined to be caused by the Contractor.

Paragraph 13.5.1; DELETE paragraph 13.5.1, and replace in lieu thereof the following NEW paragraph:

13.5.1 Where Specifications or IBC Code requires testing by an independent testing laboratory, the Owner will retain and pay for the services of a testing laboratory under a separate contract. The Contractor shall be responsible for coordinating the scheduling of all tests with the testing laboratory. Reports will be delivered to the Owner, Architect, and the Contractor simultaneously.
   1. Tests, inspections and approvals of portions of the Work not listed in the Contract Documents by required by the laws, ordinances, rules, regulations or orders or public authorities or municipalities having jurisdiction shall be made at an appropriate time.
   2. The contractor shall make arrangements for such tests, inspections and approvals with the Owner’s independent testing laboratory or with the appropriate public authority.
   3. The Contractor shall give the Owner and Architect/Engineer timely notice of when and where tests and inspections are to be made so the Architect/Engineer may observe such procedures.

Paragraph 13.5: ADD the following subparagraph:

13.5.7 If required, subsequent to completion of construction, the Contractor shall submit to the Owner a signed certification indicating that to the best of his knowledge and belief, Work was performed in accordance with the approved Construction Documents.

Paragraph 13.6.1; REVISE the paragraph as follows:

13.6.1 No interest shall be paid by the Owner to Contractor under the Contract Documents.

Paragraph 13.7.1; REVISE the paragraph as follows:

13.7.1 Contractor recognizes and agrees that Owner is a Governmental Agency and that the statute of limitations is not applicable to the Owner.
Paragraph 14.1.1; DELETE in its entirety.

Paragraph 14.1.3; REVISE the paragraph as follows:

14.1.3 If one of the reasons described in section 14.1.2 exists, the Contractor may, upon seven additional days’ written notice to the Owner and Architect, terminate the Contract and recover from the Owner payment for Work Executed to date.

Paragraph 14.1.4; DELETE in its entirety.

Paragraph 14.2.1; REVISE the paragraph as follows:

14.2.1 If the Contractor is adjudged a bankrupt or if he makes a general assignment for the benefit of his creditors, or if a receiver is appointed on account of insolvency, or if he fails to make prompt payment for materials, supplies, labor, or other items purchased or used in connection with the work or to Subcontractors, or if he fails to pursue the work in accordance with the Contract Documents or schedules established, or fails to supply enough skilled supervisors, or workmen, or materials, tools, equipment, or supplies, or the proper quality (including failure occasioned by strike, picketing, boycott, or other cessation of the work), or if he interferes with or disrupts or threatens to interfere or disrupt the operations of the Owner, or any other Contractor or Subcontractor, which by reason of labor dispute, picketing, boycott, other cause, or if he is otherwise guilty of a substantial violation of the provisions of the Contract Documents, the Owner may, without prejudice to any right or remedy and after giving the Contractor and his Surety, if any, two (2) days notice, or immediately in the event the default will, in the reasonable judgment of the Owner, endanger the project if permitted to continue, terminate the employment of the Contractor and take possession of the site and materials in the Contractor’s shop or in transit, and my finish the work by whatever method he may deem expedient. In such case, the Contractor shall not be entitled to receive any further payment until the work is finished.

Paragraph 14.2.2; REVISE the paragraph as follows:

14.2.2 When any of the above reasons exist, and the Owner confirms that sufficient cause exists to justify such action, 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, two (2) days’ written notice, terminate employment of the Contractor and may, subject to any prior rights of the surety:

1. take possession of the site and of all materials, equipment, tools, and construction equipment and machinery thereon owned by the Contractor
2. accept assignment of subcontractors pursuant to Section 5.4; and
3. finish the Work by whatever reasonable method the Owner may deem expedient.

Paragraph 14.2.4, REVISE the paragraph as follows:

14.2.4 If the unpaid balance of the Contract Sum exceeds costs of finishing the Work, including compensation for the Architects services and expenses made necessary thereby, such excess shall be paid to the Contractor. If such costs exceed the unpaid balance, the Contractor shall pay the difference to the Owner. The amount to be paid to the Contractor or Owner, as the case may be, shall, upon application, be certified by the Architect in the manner provided in Paragraph 9.4, and this obligation for payment shall survive termination of the Contract.

Paragraph 14.2; ADD the following subparagraph:

14.2.5 In addition to, and not in substitution of the remedies herein specified, the Owner may, with cause, upon two (2) days written notice to the Contractor, provide or arrange for the provision of such workmen and materials necessary to continue and complete the work contracted for hereunder for the account of the Contractor and at Contractor’s cost and expense, and apply any and all funds which may become due to the Contractor thereto, all without terminating, rescinding, or voiding this Agreement of releasing the Contractor from any liability hereunder.
Paragraph 14.4.1; REVISE the paragraph as follows:

14.4.1 The Owner may, at any time, terminate the Contract in whole or in part for the Owner’s convenience and without cause. Termination by the Owner under this Paragraph shall be by a notice of termination delivered to the Contractor specifying the extent of termination and the effective date.

Paragraph 14.4.2; REVISE the paragraph as follows:

14.4.2 Upon receipt of a notice of termination for convenience, the Contractor shall immediately in accordance with instructions from the Owner, proceed with performance of the following duties regardless of delay in determining or adjusting amounts due under this Paragraph.

.1 cease operation as specified in the notice;
.2 place no further orders and enter into no further Subcontracts for materials, labor services or facilities except as necessary to complete on-going portions of the Contract as directed by the Owner;
.3 terminate all Subcontracts and orders to the extent they relate to the Work terminated;
.4 proceed to complete the performance of Work not terminated; and
.5 take actions that may be necessary or that the Owner may direct, for the protection and preservation of the terminated Work.

Paragraph 14.4.3; REVISE the paragraph as follows:

14.4.3 Upon such termination, the Contractor shall recover as its sole remedy payment for Work properly performed in connection with the terminated portion of the Work prior to the effective date of termination and for items properly and timely fabricated off the Project site, delivered and stored in accordance with the Owner’s Instructions. The Contractor hereby waives and forfeits all other claims for payment and damages including without limitation, anticipated profits.

Paragraph 14.4; ADD the following subparagraph:

14.4.4 The Owner shall be credited for (1) payments previously made to the Contractor for the terminated portion of the Work, (2) potential claims which the Owner has against the Contractor under the Contract and (3) the value of the materials, supplies, equipment or other items that are to be disposed of by the Contractor that are part of the Contract Sum. The Owner may at its option also require that the Contractor assign the balance of the Contract to another Contractor of the Owner’s choosing. If the Contractor fails or refuse to execute any documents necessary to effectuate such assignment, the Owner may execute such documents on behalf of the Contractor.

ADD the following paragraphs:

15.1 Policies of Employment

15.1.1 The Contractor shall maintain the policies of employment as follows: The Contractor and all Subcontractors shall not discriminate against any employee or applicant for employment because of race, religion, color, sex, national origin or age. The Contractor shall take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, color, sex, national origin or age. Such action shall include but not limited to the following: Employment upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training including apprenticeship.

15.1.2 The Contractor shall post in conspicuous places, available to employees and applicants for employment, notices setting forth the policies of non-discrimination.

15.1.3 The Contractor and all subcontractors shall in all solicitations or advertisements for employees placed by them or on their behalf, state that all qualified applicants will receive consideration for employment without regards to race, religion, color, sex, national origin, or age.

15.1.4 Minority Business Enterprise (MBE) Requirements are part of the Conditions of the Contract.
15.1.5 The Maryland General Assembly has enacted a law that prohibits a person who enters into a contract with the Washington County Board of Education from knowingly employing an individual to work at a school if the individual is a registered sex offender.

It is your duty as a person who has or, who may have, a contract with the Washington County Board of Education to confirm whether an individual you plan to assign to work at a Washington County school is a registered sex offender.

A person who violates this law is guilty of a misdemeanor and or conviction is subject to imprisonment not exceeding five (5) years or a fine not exceeding $5,000.00 or both.

In the event you assign an individual to work at a Washington County school and a claim or lawsuit is asserted against the Washington County Board of Education or any of its employees or agents as a result of such act or omission, you must indemnify and hold harmless the Washington County Board of Education and its employees and agents from any and all loses, expenses, litigation expenses, attorney’s fees, court costs, settlements, judgments or the like.

15.1.6 "Protection of Resident Workers Clause" - The contractor shall comply with all federal, State and local laws, regulations and ordinances applicable to its activities and obligations under this contract. The Immigration & Nationality Act (INA) includes provisions addressing employment eligibility, employment verification, and nondiscrimination. Under the INA, employers may hire only persons who may legally work in the United States, (i.e., citizens and nationals of the U.S.) and aliens authorized to work in the U.S. The employer must verify the identity and employment eligibility of anyone to be hired. The contractor shall establish appropriate procedures and controls so no services or products under the contract documents will be performed or manufactured by any worker who is not legally eligible to perform such services or employment. For more information, visit the U.S. Citizenship and Immigration Services website: www.uscis.gov.

END OF SUPPLEMENTAL CONDITIONS
DIVISION 1

GENERAL REQUIREMENTS

BUSHEY FEIGHT MORIN ARCHITECTS INC.
473 NORTH POTOMAC STREET
HAGERSTOWN, MARYLAND 21740
301-733-5600  FAX: 301-733-5612
PART 1  GENERAL

1.01  SECTION INCLUDES

A.  Contract Description.

B.  Work by Contractor.

C.  Regulatory Requirements.

D.  Disposal of materials.

E.  Tankers.

F.  Unit prices.

G.  Alternates.

H.  Warranty.

I.  Test Cores

J.  Manufacturer’s Inspection.

1.02  CONTRACT DESCRIPTION

A.  Contract Type: Stipulated Sum Price and Unit Prices.
   1.  INTENTION OF PLANS AND SPECIFICATIONS: The intent of the Drawings and Specifications is to describe the Work that the Contractor undertakes, in full compliance with the Contract, and it is understood that the Contractor will furnish all materials, machinery, equipment, tools, supplies, transportation, labor, permits and all other incidentals necessary to the satisfactory execution and completion of the work. The plans and specifications are complementary, and what is called for by either is as binding as if called for by both.

B.  Plans and Specifications:
   1.  Contractor must notify architect of any omissions, contradictions or conflicts. Architect will provide necessary corrections or additions to plans and specifications by addendum. If Contractor does not so notify architect of any such condition, it will be assumed that the contractor has included the necessary items in his proposal to complete this specification.

   2.  It is the intent that this be a completed project as far as the contract documents set forth. It is not the intent that different phases of work on this project be delegated to various trades and subcontractors by the contract documents. The roofing contractor must make their own contracts with various subcontractors, setting forth the work these subcontractors will be held responsible for. The roofing contractor alone will be held responsible for the work of his / her subcontractor for the completed project. The roofing contractor is required to
have his subcontractor comply with all Owner and OSHA safety and security requirements.

3. If the contractor feels a conflict exists between what is considered good roofing practice and these specifications the contractor shall state in writing all objections 7 days prior to submitting quotations.

4. Roofing contractor shall have his own supervision on site at all times when his subcontractors are present.

5. Owner is not aware that any flashing or existing roof materials containing asbestos exists. Existing Hazmat studies performed by the Owner have not identified any roofing product materials containing asbestos. Contractor shall remove any asbestos containing material above roof deck and is responsible to verify.

1.03 WORK BY CONTRACTOR.

A. Work under this contract includes:

1. Furnish and install specified roofing and related components to the specified roofs by the roofing contractor at the Funkstown Elementary School located in Hagerstown, (Washington County), Maryland.

2. Disconnection and re-connection of mechanical equipment by mechanical subcontractor or removal of equipment as identified by WCPS personnel, all electrical work shall be performed by licensed electrical subcontractor.

3. Removal and reinstallation of all fixtures mounted on metal fascia that will be removed and replaced by qualified personnel licensed to perform such work.

4. Remove capped curbs from previously removed vents, fans, etc. and remove any capped plumbing vents to a position below roof deck, recap and cover opening in deck.

B. Protection:

1. Contractor shall be responsible for the full and adequate protection of the Owner’s facilities, existing roof systems, personnel, equipment, products and materials, as well as protection of its own employees and equipment. Contractor shall comply with all applicable federal, state, and local OSHA, EPA, and NIOSH requirements. Lawns, shrubbery, paved areas, and buildings shall be protected from damage. Repair damage at no extra cost to Owner.

2. Daily Housekeeping:

   a. Prior to leaving the site daily the roofing contractor shall remove all trash from the roofing project and grounds such as paper, insulation or pieces and all other trash/scrap generated by the roofing crew. All subcontractors shall remove all trash generated by their respective work daily.

   b. The site will be acceptable to the project superintendent prior to the crew departing the site, the project superintendent and the subcontractor foreman shall conduct a daily walk to make sure the roof and grounds are left in a satisfactory condition.

   c. Roofing contractor shall protect existing roof systems by placing temporary plywood walkways in areas of access.

   d. The contractor will provide interior protection and dust control means to areas that are open to the existing structural deck or areas where dust migration is required.
3. The roofing contractor shall perform appropriate inspections, surveys including Pre-Job photo/video documentation, and file timely notifications to proper authorities prior to starting roof renovation or demolition activities. Inspectors, project planners, project managers, sub-contractors and workers involved in the roof project shall have no less than 5 years of training, licenses and registrations.

4. Contractor will provide a full time superintendent employed by the prime contractor for not less than 10 years. Superintendent will be the first person on the project and the last one to leave each day.

5. The roofing systems manufacturer shall provide a full time inspector with experience of not less than 10 years of this type of roofing. The inspector shall be on site when the superintendent is present. Inspector cannot be employed by the roofing contractor. The inspector shall be present during installation of roofing system. The inspector is not required during re-pointing or metal work. The inspector shall be onsite for a minimum of 2 days (9 hours per day) out of every 5 days.

C. Scope of Work: Roofing Systems

1. Roof Replacement Areas:
   a. Refer to roof plan drawing for roof area locations.
   b. Due to size of this project, the building will not be occupied by students during the roof replacement during the summer break. However, the building will be occupied by Staff.

2. Contractor shall supply all labor, transportation, material, apparatus, tools, and permits necessary for removal and replacement of the existing roof systems
   a. All roofing applications shall be in accordance with specifications and details.
   b. Contractor shall verify roof construction and square footage and location of roof mounted equipment.
   c. Provide manufacturer’s product data and material safety data sheets for all materials used including masonry re-pointing, metal work and ladders. All data sheets shall show the same product name as it appears on the materials that are installed.
   d. No materials containing asbestos shall be provided to the job or the site.

3. The roofing contractor is responsible for ensuring all roof drains, scuppers and downspouts included in the specified roof replacement work are free flowing. The Contractor shall flush drains to verify they are free flowing prior to the project start and at project completion. The contractor shall notify Owner if any roof drains / downspouts are found slow flowing or inoperative prior to the project start.

4. Contractor shall verify all vent pipes being flashed are in working order. Contractor shall notify the Owner if any vents are clogged.

5. Complete removal and disposal of existing roofing system including but not limited to membrane, flashings, metal flashings, scuppers, downspouts, insulation, wood blocking and accessories including drains down to the underlying roof decking.

6. Prepare the roof substrate prior to installing the new roof system.
   a. Replace or repair existing defective decking on an additional per square foot cost in excess of the quantity described in the unit prices below and as indicated on the Bid Form of Proposal.
   b. Remove and dispose of obsolete rooftop curbs, drains, pitch pockets and miscellaneous penetrations. Caution shall be exercised for attachment of
new materials and removal of existing items from deck surface. Install new roof decking or metal plating over opening.

1) Install 1/8 inch steel plate over openings less than 2 by 2 ft. and 1/4 inch steel plate over openings larger than 2 by 2 ft.
2) Lap plate over decking minimum 6-inches on all sides.
3) Mechanically attach plating to decking a minimum of 12-inches o.c.
4) Owner shall identify items to be removed (See paragraph 1.3.A.2).

c. Install pressure treated wood blocking as required to match new insulation heights at wall junctions, roof edges, and penetrations and as indicated on detail drawings.

d. Install and secure preformed 45-degree pressure-treated wood cants at horizontal / vertical interfaces of expansion joint and non-wall supported deck details.

e. Raise existing roof curbs and plumbing vent stacks to minimum 8-inches above the new roof surface.

f. Replace all existing roof drain bowl assemblies. Replace with new cast iron roof drain bowl and related accessories; and replace all lead flashings. Insulate cast iron bowls, raise or lower roof drain bowl assemblies as required to accommodate the new roof system elevation, and installation of new roof drains where noted. Work shall include plumbing connections and accessories, insulating back to the closest connection to existing piping. Do not cut structural deck except at new drain locations.

g. At existing A/C pipe penetration curbs, install new detail for piping through roof deck per manufacturer’s recommendation. These include any curbs that have the plastic tops which shall not remain. Work includes reworking existing Freon and electrical conduit lines as required to accommodate new curb installation and raising height as necessary including recharging Freon lines. A/C and electrical work shall be performed by licensed HVAC and electrical subcontractors.

7. Installation of base sheet felts:
   a. Install felt prior to roof insulation application for cementitious wood fiber deck areas only.
      1) Hot-applied System:
         (a) Mechanically fasten existing 2-ply membrane to the roof deck if existing is in good condition. Fasten to meet FM 1-90 wind uplift criteria.
         (b) Adhere 1-ply base sheet to one ply membrane in a full mopping of hot asphalt at 25 lbs per 100 s.f.

8. Install new roof insulation system (tapered/non-tapered).
   a. Average total minimum thickness at any roof area must achieve minimum average R-30 for roofs above enclosed building areas. Therefore, min. 2” thickness of base insulation is required at roof drains.
   b. Provide min. 5” total thickness of flat stock insulation at steep sloped (sloped structure and deck) areas except where 1/8” tapered system is used. Provide 1” min.
   c. Cementitious wood fiber roof deck areas:
      1) Prime deck and install min. 2 inch thick tapered polyiso-cyanurate insulation with minimum 1/4 inch per foot slope. After priming deck with a water-based primer at 150 sq ft per gal. Adhere base
layer of insulation to deck with solvent free insulation adhesive at 2 gal per 100 sq ft. Typically for additional layers. All other layers adhered with hot asphalt in BUR system.

**d.** Install and adhere 4 by 4 ft. tapered insulation sumps at roof drain locations

**e.** Install tapered polyisocyanurate insulation saddles and crickets with minimum 1/2-inch per foot slope.

1) Install tapered insulation between roof drains, scuppers and along valley lines to provide positive water drainage. Adhere insulation in full application of Type III (steep slope Type IV) hot asphalt for hot applied systems or in low rise foam adhesive for single ply membrane.

2) Tapered insulation saddle and cricket slope shall equal a minimum of twice the roof slope.

3) The contractor is responsible for the elimination of ponding water along valley lines.

**f.** Install top insulation layers.

1) Install ¼” Securock cover board for single ply membrane application.

2) For BUR Alternates, install 1/2 inch thick, six-sided asphalt coated, high-density wood fiberboard insulation top layer to bottom insulation. Adhere insulation in full application of Type III or Type IV hot asphalt for hot applied systems.

3) Install and adhere tapered edge strips where blocking height exceeds insulation height.

4) Install and adhere preformed 45-degree fibered cants at all horizontal / vertical interfaces at projections and wall supported details.

**g.** Adhere insulation layers, tapered edge and cant strips in full application of Type III or IV hot asphalt for hot applied systems. Walk boards into adhesive immediately after installation to achieve solid contact.

**9.** Install 60 mil TPO single ply membrane with heat welded seams with manufacturers recommended adhesives, flashing, etc.

**10.** 4-ply **Hot** applied SBS modified built-up roofing system, elastomeric flashing and accessories by Alternate.

a. Install one base sheet composite ply and three (3) plies of Type VI plies in full application of Type III hot asphalt. Use Type IV asphalt at steep slopes.

b. Install SBS modified cap sheet in full application of Type III or Type IV hot asphalt.

c. Install roofing plies in full application of Type III hot asphalt at a rate of 25 lbs. per 100 square feet (per ply). Install ply laps in shingle fashion.

1) At steep slope locations, plies to run perpendicular to slope.

**d.** Install new lead flashings at roof drain and plumbing stack locations.

**e.** Granular surfaced cap sheet must be rolled with 75 lb. liquid filled roller after application.

**f.** All asphalt bleed areas shall be immediately coated with white granules to match cap sheet surface.

**11.** Install base flashings.

a. Install TPO membrane flashings per Base Bid or elastomeric flashings for SBS system per Alternate in solvent-free adhesive as specified in general flashing requirements.
b. Secure top edge of cap flashing membrane with metal termination bar. Seal termination bar with asphalt mastic and mesh as required to keep flashing system watertight.

c. Apply two (2) coats of Aluminum reflective coating over exposed elastomeric flashing membrane by Alternate.

12. Install new curb details.

13. Remove all capped curbs that are not being used.

14. Install all sheet metal details per specifications SMACNA requirements and standards.
   a. Install new minimum 24 gauge stainless steel metal flashings at all metal flashing locations unless specified otherwise.
   b. Coping to be .050 aluminum. Color to be mill/galvanized (match original material). No exposed fasteners.
   c. Install new stainless steel expansion joint and area divider metal cover.
   e. Install new stainless steel pitch pocket assembly.
   f. Install new slip metal counter flashing detail at non-removable unit locations.
   g. Install miscellaneous metal flashings and related accessories.

15. Install the following new details where applicable:
   a. Wall Flashing on Wall Supported Deck
   b. Piping through Roof Deck
   c. Roof Drain with Gravel Guard
   d. Pitch Pocket with Grout
   e. Metal Sleeve and Storm Collar
   f. Plumbing Vent Flashing
   g. Wood Curb
   h. Metal Curb
   i. Expansion Joint
   j. Area Divider
   k. Daily Waterstop / Tie-In
   l. Gauge & Thickness Guide (Minimum)

16. Install new walkway pads at roof access points, around all HVAC equipment and at top and bottom of ladder access points.

17. Re-point all walls above roof in the amount of 30% of the wall area and chimney above the main roof deck. Rework flashings as required due to new insulation thicknesses. Mortar color samples must be visually approved by Architect at Pre-Construction Meeting. Patch all holes in existing brick above the roof line. Remove existing sealant at vertical control/expansion joints above roof lines and install new sealant and backer rods.

18. Clean roof and brick wall areas of all old supports, brackets, etc. and fill all holes; remove all asphalt smears, new or existing.

19. Raise curbs at A/C units as needed.

20. Repair all dented exhaust fan and vent hoods. Remove hoods and pound out depressions with a mallet to return hood to its original shape. Re-install hood and paint entire unit assembly. Do not paint over existing data plates.

21. Provide new metal coping cap to match free floating fascia at face height.

22. Provide and install new free-floating metal fascia roof edge at all locations around perimeter of the roof, except at coping locations. Free-floating fascia
system shall be equal to TremLock with extension of metal fascia to match. Color to be mill or galvanized.

23. Provide one (1) new ladder where shown. Must comply with OSHA new access ladder assemblies. Paint all exterior ladders with double duty aluminum LV coating.

24. Replace condensate refrigerant piping insulation on all stand-alone condensing units for this roof area.

1.04 REGULATORY REQUIREMENTS

A. Regulatory requirements: By reference of the following standards the contractor shall install the roof system in accordance to the following standards:

1. Underwriters Laboratories (UL)
   a. UL Classified Fire Rating – UL 790, Class A

2. Factory Mutual – FM 4470 Class I Standards with
   a. FM 1-90 Insulation and Base Sheet Attachment requirements
   b. FM 1-90 Wind Loading – wind loading requirements


4. BUR System
   a. ASTM D2523 - The 4 ply system must meet the following properties of the 4 Ply Roof System Properties for
      1) Tensile Strength Machine Direction 693 lbf/in.
      2) Tensile Strength Cross Machine Direction 547 lbf/in.

1.05 DISPOSAL OF MATERIALS

A. The contractor shall be responsible for the removal and disposal of roofing materials at no additional cost to the Owner.

B. During the construction period, the Contractor shall, on a daily basis, place all of his waste materials and "non-broomable" debris into containers.

C. Provide magnetic sweep to the ground area adjacent to the building and on all parking lot and asphalt areas including walkways and all areas where roofing activities occurred from ground including but not limited too the access path to get to the building / work area. Provide magnetic sweep of the roof area as well.

D. Upon completion of the Work and before acceptance and final payment is made, the Work shall be cleaned of all rubbish, excess materials, false work, temporary structures, and equipment; and all parts of the Work shall be left in a neat, presentable condition, satisfactory to the Owner. This Work shall be considered incidental to the overall project and no additional compensation will be allowed.

1.06 TANKERS / KETTLES:

A. As part of the Contractor’s Construction Schedule, the proposed location(s) of tanker equipment shall be submitted for the Owner’s review.

B. Kettles will not be permitted onsite unless approved in writing by the Owner.
   **Permission must be requested in writing and approved by Owner prior to set up of kettle.** Additional requirements may apply.
C. Tankers/kettles shall be kept a minimum of 15 feet away from the exterior building walls and shall be segregated from the surrounding areas by temporary metal chain link fencing.

D. The designated asphalt tanker operator must remain on the same elevation, within 50 feet and within visual contact of the operational tanker at all times, and perform no other duties than tending the tanker to monitor bitumen temperatures during tanker operation and ensure that safe heating temperatures are not exceeded.

E. Provide a minimum of two fully charged and operable fire extinguishers at the asphalt tanker location.

1.07 UNIT PRICES

A. Refer to Section 01 20 00 – Price and Payment Procedures.

1.08 ALTERNATES

A. Alternates quoted on Bid Forms will be reviewed and accepted or rejected at Owner's option. Accepted Alternates will be identified in Owner-Contractor Agreement.

B. Coordinate related work and modify surrounding work as required for a complete and total installation.

C. Indicate variation of Bid Price for Alternates described below and list in Bid Form Document or any supplement to it which requests a difference in Bid price by adding to the Base Bid Price.

D. Bids will be evaluated on Base Bid Price and any of the alternates that the Owner chooses based on the available funds.

E. Cost as indicated shall include all material, labor, equipment and all other costs need to perform the work and install in accordance to the drawings, specifications and manufacturer’s instructions.

F. Alternates:
   1. BUR-SBS system to be installed in lieu of single ply membrane including base sheet, 3 intermediate plies and the SBS cap sheet per Section 07 52 00.
   2. Metal wall panels replaced above window around perimeter of building with new flush metal panels.

1.09 WARRANTY

A. Upon project completion and Owner acceptant, effective upon complete payment the Contractor shall issue a guarantee against defective workmanship and materials for a period of two (2) years.

B. Manufacturer’s standard 25 year No Dollar Limit total system warranty.
   1. Manufacturer will warrant all materials installed. No exclusions.
   2. Manufacturer will inspect the roofing system in years 2, 5, 10, 15, and 20; and shall perform any preventive maintenance and housekeeping as necessary.
3. Manufacturer will provide a written report with photographs with each inspection.

1.10 TEST CORES

A. The existing roof construction consists of the following: Tectum (cementitious wood fiber) deck, Nailed base sheet, Total 1-1/2" Polyisocyanurate insulation and perlite cover board, 4 ply BUR, and Flood coat and gravel.

1.11 MANUFACTURER’S INSPECTION

A. Qualified manufacturer’s installation or warranty representative to provide inspections at 0%, 25%, 50%, 75% and 100% of project completion. Submit report to Owner/Architect.

B. Owner reserves the right to have a 3rd party perform inspection services. If this is required it shall be at contractor’s cost if there are questions about the performance of the roof installation.

C. Roof manufacturer shall provide a full time inspector during actual performance of roof replacement. The inspector shall be on site for two (2) 9 hour days for every 5 days worked when the superintendent is present. Inspector cannot be employed by the roofing contractor.

D. Other warranties as noted per specification section.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

END OF SECTION
PART 1 GENERAL

1.01 SECTION INCLUDES
A. Schedule of Values.
B. Extra Work
C. Unauthorized Work

1.02 RELATED SECTIONS
A. Section 00 20 00 - Form of Proposal. Contract sum/price including alternates and unit prices.
B. Section 01 20 00 – Price and Payment Procedures.
C. Section 01 30 00 - Submittals: Schedule of Values.
D. Section 01 60 00 - Material and Equipment: Product substitutions.

1.03 SCHEDULE OF VALUES
A. Submit typed schedule on AIA Form G702 – Application and Certification for payment; and G703 – Continuation Sheet. Contractor's electronic media printout will be considered.
B. Submit Schedule of Values in triplicate within 15 days after date established in Notice to Proceed.
C. Format: Utilize the Table of Contents of this Project Manual. Identify each line item with number and title of the major specification Section. Identify site mobilization, bonds and insurance.
D. Revise schedule to list approved Change Orders, with each Application for Payment.
E. Include, as a separate line item, the amount of allowance included in the Contract for Unit Cost Allowances. Identify quantities taken from Contract Documents multiplied by unit cost to achieve total for each item.

1.04 EXTRA WORK
A. Change orders will not be approved for any reason other than items that were totally unforeseen. Any unforeseen items should be immediately brought to the attention of the project superintendent. No extra work can be performed unless authorized by Owner.

1.05 UNAUTHORIZED WORK
A. Work performed which is not provided for in the Contract, and Work done beyond limits shown on the Plans or as directed, or Extra Work done without written authorization will be considered unauthorized, shall be at the expense of the roofing contractor, and will not be measured or paid for by the Owner. Work so done maybe ordered, removed, and replaced at the roofing contractor’s expense.
PART 2 PRODUCTS – Not Used

PART 3 EXECUTION – Not Used

END OF SECTION
PART 1  GENERAL

1.01  SECTION INCLUDES

A.  Procedures for preparation and submittal of Applications for Payment.

1.02  RELATED SECTIONS

A.  Section 00 30 00 - General Conditions: Progress Payments and Final Payment.

B.  Section 00 40 00 - Owner/Contractor Agreement: Contract Sum/Price and unit prices, amounts of Progress Payments and Retainage, and time schedule for submittals.

C.  Section 01 01 90 - Contract Considerations: Schedule of Values.

D.  Section 01 02 80 - Change Order Procedures: Procedures for changes to the Work.

E.  Section 01 20 00 - Price and Payment Procedures.

F.  Section 01 30 00 - Submittals: Submittal procedures.

G.  Section 01 70 00 - Contract Closeout: Final Payment.

1.03  FORMAT

A.  AIA Form G702 – Application and Certification for Payment and G703 – Continuation Sheet.

B.  For each item, provide a column for listing: Item Number; Description of work; Scheduled Value, Previous Applications: Work in Place and Site Stored Materials under this Application: Authorized Change Orders; Total Completed and Stored to Date of Application; Percentage of Completion; Balance to Finish; and Retainage.

C.  Utilize Table of Contents to identify each line item with number and title of the major specification section.

1.04  PREPARATION OF APPLICATIONS

A.  Present required information in typewritten form or on approved electronic media printout.

B.  Execute certification by signature of authorized officer.

C.  Use data from approved Schedule of Values. Provide dollar value in each column for each line item for portion of work performed and for site stored products.

D.  List each authorized Change Order as an extension on continuation sheet, listing Change Order number and dollar amount as for an original item of Work.
E. Prepare Application for Final Payment as specified in Section 01 70 00.

1.05 SUBMITTAL PROCEDURES

A. Submit four (4) copies of each Application for Payment.

B. Submit an updated construction schedule with each Application for Payment.

C. Payment Period: Submit at intervals stipulated in the Agreement.

D. Submit under transmittal letter specified in Section 01 30 00.

1.06 SUBSTANTIATING DATA

A. When Architect/Engineer requires substantiating information, submit data justifying dollar amounts in question.

B. Provide one copy of data with cover letter for each copy of submittal. Show Application number and date, and line item by number and description.

PART 2 PRODUCTS - Not Used

PART 3 EXECUTION - Not Used

END OF SECTION
PART 1 GENERAL

1.01 SECTION INCLUDES

A. Submittals.
B. Documentation of change in Contract Sum/Price and Contract Time.
C. Change procedures.
E. Stipulated Sum change order.
F. Unit price change order.
G. Time and material change order.
H. Execution of change orders.
I. Correlation of Contractor submittals.

1.02 RELATED SECTIONS

A. Section 00 30 00 - General Conditions: Governing requirements for changes in the Work, in Contract Sum/Price, and Contract Time.
B. Section 00 35 00 - Supplementary Conditions: Percentage Allowances for Contractor's overhead and profit.
C. Section 00 40 00 Owner/Contractor Agreement Forms: Monetary values of established Unit Prices and percentage allowances for Contractor's overhead and profit.
D. Section 00 94 00 – Change Order Request: Allowable mark up of changes in Contract sum/ value.
E. Section 01 01 90 - Contract Considerations: Schedule of Values.
F. Section 01 02 70 - Applications for Payment: Payment applications.
G. Section 01 60 00 - Material and Equipment: Product options and substitutions.
H. Section 01 70 00 - Contract Closeout: Project Record Documents.

1.03 SUBMITTALS

A. Submit name of the individual authorized to receive change documents, and be responsible for informing others in Contractor's employ or Subcontractors of changes to the Work.
B. Change Order Forms: A.I.A. Form G701 - Change Order.

1.04 DOCUMENTATION OF CHANGE IN CONTRACT SUM/PRICE AND CONTRACT TIME

A. Maintain detailed records of work done on a time and material basis. Provide full information required for evaluation of proposed changes, and to substantiate costs of changes in the Work.

B. Document each quotation for a change in cost or time with sufficient data to allow evaluation of the quotation.

C. On request, provide additional data to support computations:
   1. Quantities of products, labor, and equipment.
   2. Taxes, insurance and bonds.
   3. Overhead and profit.
   5. Credit for deletions from Contract, similarly documented.

D. Support each claim for additional costs, and for work done on a time and material basis, with additional information:
   1. Origin and date of claim.
   2. Dates and times work was performed, and by whom.
   3. Time records and wage rates paid.
   4. Invoices and receipts for products, equipment, and subcontracts, similarly documented.

1.05 EXTRA WORK

A. Change orders will not be approved for any reason other than items that were totally unforeseen. Any unforeseen items should be immediately brought to the attention of the project superintendent. No extra work can be performed unless authorized by Owner.

1.06 UNAUTHORIZED WORK

A. Work performed which is not provided for in the Contract, and Work done beyond limits shown on the Plans or as directed, or Extra Work done without written authorization will be considered unauthorized, shall be at the expense of the roofing contractor, and will not be measured or paid for by the Owner. Work so done maybe ordered, removed, and replaced at the roofing contractor's expense.

1.07 CHANGE PROCEDURES

A. The Architect/Engineer will advise of minor changes in the Work not involving an adjustment to Contract Sum/Price or Contract Time as authorized by AIA A201, 1997 Edition, and Paragraph 7.4 by issuing supplemental instructions on AIA Form G710.

B. The Architect/Engineer may issue a Proposal Request which includes a detailed description of a proposed change with supplementary or revised Drawings and specifications, a change in Contract Time for executing the change with a stipulation of any overtime work required and the period of time during which the requested price will
be considered valid. Contractor will prepare and submit an estimate within seven (7) working days.

C. The Contractor may propose a change by submitting a request for change to the Architect/Engineer, describing the proposed change and its full effect on the Work, with a statement describing the reason for the change, and the effect on the Contract Sum/Price and Contract Time with full documentation and a statement describing the effect on Work by separate or other contractors. Document any requested substitutions in accordance with Section 01600.

1.08 CONSTRUCTION CHANGE AUTHORIZATION

A. Architect/Engineer may issue a document, signed by the Owner, instructing the Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.

B. The document will describe changes in the Work, and will designate method of determining any change in Contract Sum/Price or Contract Time.

C. Promptly execute the change in Work.

1.09 STIPULATED SUM CHANGE ORDER

A. Based on Proposal Request and Contractor's fixed price quotation or Contractor's request for a Change Order as approved by Architect/Engineer.

1.10 UNIT PRICE CHANGE ORDER

A. For predetermined unit prices and quantities, the Change Order will be executed on a fixed unit price basis.

B. For unit costs or quantities of units of work which are not predetermined, execute Work under a Construction Change Authorization.

C. Changes in Contract Sum/Price or Contract Time will be computed as specified for Time and Material Change Order.

1.11 TIME AND MATERIAL CHANGE ORDER

A. Submit itemized account and supporting data after completion of change, within time limits indicated in the Conditions of the Contract.

B. Architect/Engineer will determine the change allowable in Contract Sum/Price and Contract Time as provided in the Contract Documents.

C. Maintain detailed records of work done on Time and Material basis.

D. Provide full information required for evaluation of proposed changes, and to substantiate costs for changes in the Work.
1.12 EXECUTION OF CHANGE ORDERS

A. Execution of Change Orders: Architect/Engineer will issue Change Orders for signatures of parties as provided in the Conditions of the Contract.

1.13 CORRELATION OF CONTRACTOR SUBMITTALS

A. Promptly revise Schedule of Values and Application for Payment forms to record each authorized Change Order as a separate line item and adjust the Contract Sum/Price.

B. Promptly revise progress schedules to reflect any change in Contract Time, revise sub-schedules to adjust time for other items of work affected by the change, and resubmit.

C. Promptly enter changes in Project Record Documents.

PART 2 PRODUCTS - Not Used

PART 3 EXECUTION - Not Used

END OF SECTION
PART 1 GENERAL

1.01 SECTION INCLUDES

A. Coordination.

B. Cutting and Patching.

C. Preconstruction and Site Mobilization Conference.

D. Progress Meetings.

E. Pre-installation conferences.

F. Final Inspection.

1.02 RELATED SECTIONS

A. Section 01 04 10 - Project Coordination.

B. Section 01 04 50 – Cutting and Patching.

1.03 COORDINATION

A. Coordinate scheduling, submittals, and Work of the various Sections of specifications to assure efficient and orderly sequence of installation of interdependent construction elements, with provisions for accommodating items installed later.

B. Verify that utility requirement characteristics of operating equipment are compatible with building utilities. Coordinate work of various Sections having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.

C. Coordinate space requirements and installation of mechanical and electrical work which are indicated diagrammatically on Drawings. Follow routing shown for pipes, ducts, and conduit, as closely as practicable; place runs parallel with line of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.

D. In finished areas except as otherwise indicated, conceal pipes, ducts, and wiring within the construction. Coordinate locations of fixtures and outlets with finish elements.

E. Coordinate completion and clean up of Work of separate Sections in preparation for Substantial Completion and for portions of Work designated for Owners partial occupancy.

F. After Owner occupancy of premises, coordinate access to site for correction of defective Work and Work not in accordance with Contract Documents, to minimize disruption of Owner's activities.
1.04 CUTTING AND PATCHING

A. Refer to Section 01 04 50.

1.05 PRECONSTRUCTION AND SITE MOBILIZATION CONFERENCE

A. Architect/Engineer will schedule a conference after Notice of Award.

B. Attendance Required: Owner, Architect/Engineer, Contractor, Contractor’s Superintendent and major subcontractors, and Roof Inspector.

C. Agenda:
   1. Execution of Owner-Contractor Agreement.
   2. Submission of executed bonds and insurance certificates.
   4. Submission of list of Subcontractors, list of products, and Schedule of Values.
   5. Designation of personnel representing the parties in Contract, and in field, and the Architect/Engineer.
   6. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, Change Orders and Contract closeout procedures.
   7. Scheduling and Progress Schedule.
   8. Submittals in accordance with paragraphs 1.06.D & E in Section 01 30 00.
   9. Safety Plan
   10. Walkover Inspection
   11. Mortar Color Selection (Re-pointing).
   12. Pre-Condition Survey: To be provided to Owner with photographs to note pre-existing leaks condition.

1.06 PROGRESS MEETINGS

A. Schedule and administer meetings throughout progress of the Work at bi-weekly intervals.

B. Make arrangements for meetings, prepare agenda with copies for participants, and preside at meetings.
   1. Architect will record minutes and distribute within seven (7) working days after the progress meeting to the Owner, Consultants, and General Contractor.

C. Attendance Required: Job superintendent, major Subcontractors and suppliers, Owner, Architect/Engineer, as appropriate to agenda topics for each meeting.

D. Agenda:
   1. Review minutes of previous meetings.
   2. Review of Work progress.
   3. Field observations, problems, and decisions.
   4. Identification of problems which impede planned progress.
   5. Review of submittals schedule and status of submittals.
   6. Review of off-site fabrication and delivery schedules.
   7. Maintenance of progress schedule.
   8. Corrective measures to regain projected schedules.
   9. Planned progress during succeeding work period.
10. Coordination of projected progress.
11. Maintenance of quality and work standards.
12. Effect of proposed changes on progress schedule and coordination.
13. Other business relating to Work.
14. Develop punch list items requiring correction.

1.07 PRE-INSTALLATION CONFERENCES

A. When required in individual specification Section, convene a pre-installation conference at work site prior to commencing work of the Section.

B. Require attendance of parties directly affecting, or affected by, work of the specific Section.

C. Notify Architect/Engineer seven (7) days in advance of meeting date.

D. Prepare agenda, preside at conference, record minutes, and distribute copies within seven (7) working days after conference to participants, with two (2) copies to Architect/Engineer and two (2) copies to the Owner.

E. Review conditions of installation, preparation and installation procedures, and coordination with related work.

1.08 FINAL INSPECTION

A. Schedule and administer meetings throughout progress of the Work at bi-weekly intervals.

B. Make arrangements for meetings, prepare agenda with copies for participants, and preside at meetings.
   1. Architect will record minutes and distribute within seven (7) working days after the progress meeting to the Owner, Consultants, and General Contractor.

C. Attendance Required: Job superintendent, major Subcontractors and suppliers, Owner, Architect/Engineer, as appropriate to agenda topics for each meeting.
   1. Final Inspection:
      a. Will be scheduled by upon job completion.
      b. Attendance:
         1) Project Superintendent.
         2) Roofing Contractor / other subcontractors.
         3) Representative of Owner
         4) Architect
         5) Roofing Inspector
      c. Minimum agenda:
         1) Walkover inspection.
         2) Identification of problems, which may impede issuance of warranty.
PART 2 PRODUCTS - Not Used

PART 3 EXECUTION - Not Used

END OF SECTION
PART 1 GENERAL

1.01 SECTION INCLUDES

A. Project coordination administrator.
B. Construction mobilization.
C. Schedules.
D. Submittals.
E. Coordination drawings.
F. Closeout procedures.

1.02 RELATED SECTIONS

A. Section 01 03 90 - Coordination and Meetings: Project meetings, Preconstruction Conferences, Progress meetings.
B. Section 01 70 00 - Contract Closeout: Contract closeout procedures.

1.03 PROJECT COORDINATION ADMINISTRATOR

A. Project Coordination Administrator: Owner.

1.04 CONSTRUCTION MOBILIZATION

A. Cooperate with the Administrator in allocation of mobilization areas of site, for access, traffic, and parking facilities.
B. During construction, coordinate use of site and facilities through the Administrator.
C. Comply with Administrator's procedures for intra-project communications; submittals, reports and records, schedules, coordination drawings, and recommendations; and resolution of ambiguities and conflicts.
D. Comply with instructions of the Administrator for use of temporary utilities and construction facilities.
E. Coordinate filed engineering and layout work under instructions of the Administrator.

1.05 SCHEDULES

A. Submit bar chart preliminary progress schedule. During project provide a roof plan marked with day to day synopsis of areas being roofed. Provide at Pre-Construction Meeting and at each Progress Meeting updated accordingly.
B. After review, revise and resubmit schedule to comply with revised Project schedule.

C. During progress of Work, revise and resubmit with Applications for Payment.

D. At each meeting provide roof plan with marked day to day activities.

1.06 SUBMITTALS

A. Submit preliminary shop drawings, product data and samples in accordance with Section 01300 for review and compliance with Contract Documents, for field dimensions and clearances, for relation to available space, and for relation to work of separate contracts. Revise and resubmit as required.

B. Submit Applications for Payment on A.I.A. Form G702 and G703 for review, and for transmittal to Architect/Engineer. Confirm if Owner wants to use IAC payment form.

C. Submit requests for interpretation of Contract Documents, and obtain instructions through Architect/Engineer.

D. Requests for substitutions after the bids are opened are not allowed.

E. Process requests for change orders, through Administrator.

F. Deliver closeout submittals for review and preliminary inspection reports, for transmittal to Architect/Engineer.

1.07 COORDINATION DRAWINGS

A. Provide information required by Administrator for preparation of coordination drawings.

B. Review drawings prior to submission to Architect/Engineer.

1.08 CLOSEOUT PROCEDURES

A. Notify Administrator when Work is considered ready for Substantial Completion. Accompany Architect on preliminary inspection to determine items to be listed for completion or correction in Contractor's notice of Substantial Completion.

B. Comply with Architect's instructions to correct items of Work listed in executed Certificates of Substantial Completion and for access to Owner occupied areas.

C. Notify Architect and Owner when Work is considered finally complete.

D. Comply with Administrator's instructions for completion of items of Work determined by the Architect/Engineer's final inspection.
PART 2 PRODUCTS - Not Used

PART 3 EXECUTION - Not Used

END OF SECTION
PROCEDURES

PART 1   GENERAL

1.01  SECTION INCLUDES

A. Schedule of values.
B. Applications for payment.
C. Change procedures.
D. Defect assessment.
E. Alternates.
F. Unit Prices.

1.02  SCHEDULE OF VALUES

A. Refer to Section 01 01 90 - Contract Considerations.

1.03  APPLICATIONS FOR PAYMENT

A. Refer to Section 01 02 70 – Applications for Payment.

1.04  CHANGE PROCEDURES

A. Refer to Section 01 02 80 – Change Order Procedures.

B. Field Directive: Architect/Engineer may issue directive, signed by Owner, instructing Contractor to proceed with change in the Work, for subsequent inclusion in a Change Order. Document will describe changes in the Work, and designate method of determining any change in Contract Sum/Price or Contract Time. Promptly execute change.

1.05  DEFECT ASSESSMENT

A. Replace the Work, or portions of the Work, not conforming to specified requirements.

B. If, in the opinion of the Owner/Architect/Engineer, it is not practical to remove and replace the Work, the Owner/Architect/Engineer will direct appropriate remedy or adjust payment.

C. The defective Work may remain (at the Owner’s Option), but unit sum/price will be adjusted to new sum/price at discretion of Owner/Architect/Engineer.

D. Defective Work (at the Owner’s Option) will be partially repaired to instructions of Architect/Engineer, and unit sum/price will be adjusted to new sum/price at discretion of Owner/Architect/Engineer.

E. Individual specification sections may modify these options or may identify specific formula or percentage sum/price reduction.
F. Authority of Owner/Architect/Engineer to assess defects and identify payment adjustments is final.

G. Non-Payment For Rejected Products: Payment will not be made for rejected products for any of the following:
   1. Products wasted or disposed of in a manner that is not acceptable.
   2. Products determined as unacceptable before or after placement.
   3. Products not completely unloaded from transporting vehicle.
   4. Products placed beyond lines and levels of required Work.
   5. Products remaining on hand after completion of the Work.

1.06 ALTERNATES

A. Alternates quoted on the Bid Form will be reviewed and accepted or rejected at the Owner’s option. Accepted alternates will be identified in the Owner-Contractor Agreement.

B. Coordinate related work and modify surrounding work as applicable for a complete and total installation.

C. Indicate variation of Bid Price for Alternates described below and list in Bid Form Document or any supplement to it which requests a difference in Bid price by adding to the Base Bid Price.

D. Bids will be evaluated on Base Bid Price and any of the alternates that the Owner chooses based on the available funds.

E. Cost as indicated shall include all material, labor, equipment and all other costs need to perform the work and install in accordance to the drawings, specifications and manufacturer’s instructions.

F. Schedule of Alternates: Refer to Section 01 01 00 – Summary of Work.

1.07 UNIT PRICES

A. Materials and its installation cost which may be required for additional roof deck or roof edge repair have been included in the Base Bid cost and are identified within the proposal form.

B. Measurement methods delineated in individual specification sections complement criteria of this section. In event of conflict, requirements of individual specification section govern.

C. Take measurements and compute quantities. Owner and Architect/Engineer will verify measurements and quantities.

D. Unit Quantities: Quantities and measurements indicated in Bid Form are for contract purposes only. Actual quantities provided shall determine payment. When actual Work requires more or fewer quantities than those quantities indicated, provide required quantities at unit sum/prices contracted.

E. Payment Includes: Full compensation for required labor, products, tools, equipment, plant and facilities, transportation, services and incidentals; erection, application or installation of item of the Work; overhead and profit.
F. Final payment for Work governed by unit prices will be made on basis of actual measurements and quantities accepted by Architect/Engineer multiplied by unit sum/price for Work incorporated in or made necessary by the Work.

G. Measurement Of Quantities:
1. Weigh Scales: Inspected, tested and certified by applicable State Weights and Measures department within past year.
2. Platform Scales: Of sufficient size and capacity to accommodate conveying vehicle.
3. Metering Devices: Inspected, tested and certified by applicable State department within past year.
4. Measurement by Weight: Concrete reinforcing steel, rolled or formed steel or other metal shapes will be measured by handbook weights. Welded assemblies will be measured by handbook or scale weight.
5. Measurement by Volume: Measured by cubic dimension using mean length, width and height or thickness.
6. Measurement by Area: Measured by square dimension using mean length and width or radius.
7. Linear Measurement: Measured by linear dimension, at item centerline or mean chord.
8. Stipulated Sum/Price Measurement: Items measured by weight, volume, area, or linear means or combination, as appropriate, as completed item or unit of the Work.

H. The following unit prices shall be identified in the Form of Proposal and shall be included within the Base Bid that they are associated.
1. Unit prices are required on the following items to provide for the addition or deletion of work if the Architect’s estimated quantities vary more than 10 percent (±) from the actual work required. Unit prices shall include all supervision, labor, equipment, materials, markup, overhead and profit as required. These prices are based on performance during the period of the contract. Unused quantities shall be credited from the contract at the end of the project per the unit price cost.
2. The purpose of these Unit Prices is for corrective work that has not been included within the Contract Documents unless otherwise noted.
3. Prior to utilizing materials from the unit price quantities, the Owner and Architect shall provide prior approval.
4. Unit Price Schedule (Non-Prevailing Wage):
   a. Unit Price No. 1 – Repair Gypsum Deck
      1) Description: Includes material and labor to patch / repair existing gypsum deck per Section 03 51 00 as deemed necessary by the Owner/ Architect. Base Quantity to be provided by contract is 100 s.f.
      2) Unit of Measure: Square Foot.
   b. Unit Price No. 2 – Replace Gypsum Deck
      1) Description: Includes material and labor to replace existing gypsum deck per Section 03 51 00 as deemed necessary by the Owner/ Architect. Base Quantity to be provided by contract is 100 s.f.
      2) Unit of Measure: Square Foot.
   c. Unit Price No. 3 – Blocking
      1) Description: Includes material and labor and all other costs for 2x8 blocking due to deterioration or damage or additional blocking would be required not specifically called for on the Drawings and Specification.
      2) Unit of Measure: Lineal Feet.
   d. Unit Price No. 4 – Re-Pointing
1) Description: Masonry repointing above roof decks over quantities indicated in Section 04 90 01. Base Quantity: 1,000 s.f.

2) Unit of Measure: Square Foot.

5. Unit Price Schedule (Prevailing Wage):
   a. Unit Price No. 1a – Repair Gypsum Deck
      1) Description: Includes material and labor to patch / repair existing gypsum deck per Section 03 51 00 as deemed necessary by the Owner/ Architect. Base Quantity to be provided by contract is 100 s.f.
      2) Unit of Measure: Square Foot.
   b. Unit Price No. 2a – Replace Gypsum Deck
      1) Description: Includes material and labor to replace existing gypsum deck per Section 03 51 00 as deemed necessary by the Owner/ Architect. Base Quantity to be provided by contract is 100 s.f.
      2) Unit of Measure: Square Foot.
   c. Unit Price No. 3a – Blocking
      1) Description: Includes material and labor and all other costs for 2x8 blocking due to deterioration or damage or additional blocking would be required not specifically called for on the Drawings and Specification.
      2) Unit of Measure: Lineal Feet.
   d. Unit Price No. 4 – Re-Pointing
      1) Description: Masonry repointing above roof decks over quantities indicated in Section 04 90 01. Base Quantity: 1,000 s.f.
      2) Unit of Measure: Square Foot.

PART 2 PRODUCTS - Not Used.

PART 3 EXECUTION - Not Used.

END OF SECTION
## PROPOSAL REQUEST FORM

### Project Name:

### Date:

### Proposal Request #:

### Prime Contractor:

### Subcontractor:

### Sub-Subcontractor:

### Proposal Scope (Include a brief description of the work)

<table>
<thead>
<tr>
<th>A. Labor, Materials, Equipment</th>
<th>(\text{Subtotal A – Labor, Materials, Equipment:} )</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.1 Direct Payroll – Wages less burden (no fringes, insurance, taxes, etc.)</td>
<td>$ -</td>
</tr>
<tr>
<td>A.2 Material Cost</td>
<td>$ -</td>
</tr>
<tr>
<td>A.3 Equipment Rental</td>
<td>$ -</td>
</tr>
<tr>
<td>A.4 Direct Equipment Cost</td>
<td>$ -</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B. Overhead &amp; Profit</th>
<th>(\text{Subtotal B – Overhead &amp; Profit:} )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allowable Overhead &amp; Profit = (Subtotal A) x (% listed below)</td>
<td>$ -</td>
</tr>
<tr>
<td>15% $0.00 - $1,000</td>
<td>$ -</td>
</tr>
<tr>
<td>10% $1,001 - $5,000</td>
<td>$ -</td>
</tr>
<tr>
<td>7% $5,001 - $10,000</td>
<td>$ -</td>
</tr>
<tr>
<td>5% $10,001 - $25,000</td>
<td>$ -</td>
</tr>
<tr>
<td>Over $25,000 negotiable not to exceed 5%</td>
<td>$ -</td>
</tr>
</tbody>
</table>

| C. Sales Tax (6% x (A.2 + A.3)) | $ - |
| D. Labor Burden | \(\% \times A.1 \) |
| E. Subcontractor Cost | \(\text{Subtotal E – Subcontractor Cost:} \) |
| Subcontractor Cost (Provide detailed breakdown on separate form) | $ - |
| Allowable Prime Contractor Mark-Up (5% of Subcontractor Cost) | $ - |

| F. Subtotal (A+B+C+D+E) | $ - |
| G. Bond (1% of F) | $ - |

### H. TOTAL COST = F + G

| \(\text{TOTAL COST:} \) | $ - |
PART 1    GENERAL

1.01   SECTION INCLUDES

A. Submittal procedures.
B. Proposed products list.
C. Shop drawings.
D. Product data.
E. Samples.
F. Manufacturers' instructions.
G. Manufacturers' certificates.

1.02   RELATED SECTIONS

A. Section 01 01 90 - Contract Considerations: Schedule of Values.
B. Section 01 40 00 - Quality Requirements: Manufacturers' field services and reports.
C. Section 01 70 00 - Contract Closeout: Contract warranty and manufacturer's certificates closeout submittals.

1.03   SUBMITTAL PROCEDURES

A. Transmit each submittal with Architect/Engineer accepted form. Provide one copy to Owner at time of submission to Architect/Engineer.
B. Sequentially number the transmittal forms in accordance with Architect's submittal schedule. Re-submittals to have original number with an alphabetic suffix.
C. Identify Project, Contractor, Subcontractor or supplier; pertinent Drawing sheet and detail number(s), and specification Section number, as appropriate.
D. Apply Contractor's stamp, signed or initialed certifying that review, verification of Products required, field dimensions, adjacent construction Work, and coordination of information, is in accordance with the requirements of the Work and Contract Documents.
E. Schedule submittals to expedite the Project, and deliver to Architect/Engineer at business address. Coordinate submission of related items.
F. Identify variations from Contract Documents and Product or system limitations which may be detrimental to successful performance of the completed Work.
G. Provide space for Contractor and Architect/Engineer review stamps.
H. Revise and resubmit submittals as required, identify all changes made since previous submittal.
I. Distribute copies of reviewed submittals to concerned parties. Instruct parties to promptly report any inability to comply with provisions.

1.04 PROPOSED PRODUCTS LIST
   A. Within 15 days after date of Owner-Contractor Notice to Proceed, submit complete list of major products proposed for use, with name of manufacturer, trade name, and model number of each product.
   B. For products specified only by reference standards, give manufacturer, trade name, model or catalog designation, and reference standards.

1.05 SHOP DRAWINGS
   A. Submit in the form of one reproducible transparency and three opaque reproductions.
   B. After review, reproduce and distribute in accordance with Article on Procedures above and for Record Documents described in Section 01 70 00 - Contract Closeout.

1.06 PRODUCT DATA, MSDS SHEETS AND OTHER DATA
   A. Submit electronically in pdf. format. All submittals shall bear the contractor’s review stamp that indicates the submitted material complies with specification. Refer to submittal list at the end of the section.
   B. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers’ standard data to provide information unique to this Project.
   C. After review, distribute in accordance with Article on Procedures above and provide copies for Record Documents described in Section 01 70 00 - Contract Closeout.
   D. The Contractor shall provide at Pre-Construction meeting approved insulation samples, product data sheets shall accompany samples and be transmitted to the Architect’s office.
      1. Polyisocyanurate insulation board
      2. High density fiberboard
      3. Manufacturer’s tapered insulation plan per roof section.
      4. Product data sheets on ALL materials including roof materials, masonry products, paint, caulks, fasteners, adhesives, etc.
      5. MSDS sheets for all materials. (MSDS must have same name as material that is installed).
      7. Emergency Contact List.
      8. Superintendent’s credentials for approval.
      9. Sample 20 Year NDL Total System Warranty.
     10. Schedule of Values – line item per specification and subsequent materials within spec section.
     11. Pre-Job Survey video/photo documentation (minimum of 3 copies)
   E. The Contractor shall provide prior to Pre-Construction meeting to the Owner / Architect:
      1. Their Site Specific Safety Plan.
      2. OSHA 300 logs.
      3. Sub-contractor Roles and Responsibilities signed.
      4. Payment and performance bonds for 100% of the Contract Price. The contract price is defined as proposal price of the contract. The penal amount of the performance bonds shall be 100% of the proposal price including all labor and materials.
all material. Performance Bond will be provided by the contractor that is awarded the contract.
5. Insurance certificate with Owner named as the additionally insured.
6. Properly executed Contractor Agreement.

F. The Contractor shall provide upon completion of tear-off to the Owner:
   1. Waste Manifest signed by the plant after the work is complete.
   2. The Contractor shall provide upon project completion to the Owner:
      Fully executed Final Waiver of Lien from Contractor, subcontractor, subcontractor's laborers and material men, and Sub-Subcontractors of Subcontractor.
   3. Two (2) year Contractor’s Installation Warranty.

1.07 SAMPLES
A. Submit samples to illustrate functional and aesthetic characteristics of the Product, with integral parts and attachment devices. Coordinate sample submittals for interfacing work.
B. Submit samples of finishes from the full range of manufacturers' standard colors, textures, and patterns for Architect/Engineer's selection.
C. Include identification on each sample, with full Project information.
D. Submit the number or samples specified in individual specification Sections; one of which will be retained by Architect/Engineer.
E. Reviewed samples which may be used in the Work are indicated in individual specification Sections.

1.08 MANUFACTURER'S INSTRUCTIONS
A. When specified in individual specification Sections, submit manufacturers' printed instructions for delivery, storage, assembly, installation, start-up, adjusting, and finishing, in quantities specified for Product Data.
B. Identify conflicts between manufacturers' instructions and Contract Documents.

1.09 MANUFACTURER'S CERTIFICATES
A. When specified in individual specification Sections, submit manufacturers' certificate to Architect/Engineer for review, in quantities specified for Product Data.
B. Indicate material or product conforms to or exceeds specified requirements. Submit supporting reference date, affidavits, and certifications as appropriate.
C. Certificates may be recent or previous test results on material or Product, but must be acceptable to Architect/Engineer.

PART 2 PRODUCTS - Not Used

PART 3 EXECUTION - Not Used

END OF SECTION
PART 1 GENERAL

1.01 SECTION INCLUDES
   A. General Requirements.
   B. Quality control and control of installation.
   C. Tolerances
   D. References.
   E. Mock-up requirements.
   F. Testing and inspection services.
   G. Manufacturers’ field services.
   H. Examination.
   I. Preparation.

1.02 GENERAL REQUIREMENTS
   A. Contractor shall:
      1. Submit an affidavit attesting the subcontractor has in place and fully implemented a written Health, Safety and Environmental plan and the plan is compliant with all applicable Federal, State, and local regulations.
      2. Be experienced in cold and hot applied built-up roofing for a 5-Year minimum.
      3. Be acceptable to Owner.
      4. Be manufacturer certified or an approved Subcontractor to install manufacturer’s products.
      5. Has not been in Chapter 7 bankruptcy during the last ten (10) years.
      6. Provide list of at least 5 projects available for inspection employing the same roof system.

1.03 QUALITY CONTROL AND CONTROL OF INSTALLATION
   A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce Work of specified quality.
   B. Comply with manufacturers' instructions, including each step in sequence.
   C. When manufacturers' instructions conflict with Contract Documents, request clarification from Architect/Engineer before proceeding.
   D. Comply with specified standards as minimum quality for the Work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
   E. Perform Work by persons qualified to produce required and specified quality.
   F. Verify field measurements are as indicated on Shop Drawings or as instructed by manufacturer.
   G. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, or disfigurement.
1.04 TOLERANCES
A. Monitor fabrication and installation tolerance control of products to produce acceptable Work. Do not permit tolerances to accumulate.
B. Comply with manufacturers' tolerances. When manufacturers' tolerances conflict with Contract Documents, request clarification from Architect/Engineer before proceeding.
C. Adjust products to appropriate dimensions; position before securing products in place.

1.05 REFERENCES
A. For products or workmanship specified by association, trades, or other consensus standards, comply with requirements of standard, except when more rigid requirements are specified or are required by applicable codes.
B. Conform to reference standard by date of issue current on date for receiving bids, except where specific date is established by code.
C. Obtain copies of standards where required by product specification sections.
D. When specified reference standards conflict with Contract Documents, request clarification from Architect/Engineer before proceeding.
E. Neither contractual relationships, duties, or responsibilities of parties in Contract nor those of Architect/Engineer shall be altered from Contract Documents by mention or inference otherwise in reference documents.

1.06 MOCK-UP REQUIREMENTS
A. Tests will be performed under provisions identified in this section and identified in respective product specification sections.
B. Assemble and erect specified items with specified attachment and anchorage devices, flashings, seals, and finishes.
C. Accepted mock-ups shall be comparison standard for remaining Work.
D. Where mock-up has been accepted by Architect/Engineer and is specified in product specification sections to be removed; remove mock-up and clear area when directed to do so by Architect/Engineer.

1.07 TESTING AND INSPECTION SERVICES
A. Contractor will employ and pay for specified services of an independent firm to perform testing and inspection.
B. The independent firm will perform tests, inspections and other services specified in individual specification sections and as required by Architect/Engineer.
   1. Laboratory: Authorized to operate at Project location.
   2. Laboratory Staff: Maintain full time registered Engineer, specialist on staff to review services.
   3. Testing Equipment: Calibrated at reasonable intervals with devices of an accuracy traceable to National Bureau of Standards or accepted values of natural physical constants.
C. Testing, inspections and source quality control may occur on or off project site. Perform off-site testing as required by Architect/Engineer or Owner.
D. Reports will be submitted by independent firm to Owner/Contractor/Architect and Engineer indicating observations and results of tests and indicating compliance or non-
E. Cooperate with independent firm; furnish samples of materials, design mix, equipment, tools, storage, safe access, and assistance by incidental labor as requested.
   1. Notify Architect/Engineer and independent firm 24 hours prior to expected time for operations requiring services.
   2. Make arrangements with independent firm and pay for additional samples and tests required for Contractor's use.

F. Testing and employment of testing agency or laboratory shall not relieve Contractor of obligation to perform Work in accordance with requirements of Contract Documents.

G. Re-testing or re-inspection required because of non-conformance to specified requirements shall be performed by same independent firm on instructions by Owner/Architect/Engineer. Payment for re-testing or re-inspection will be charged to Contractor by deducting testing charges from Contract Sum/Price.

H. Agency Responsibilities:
   1. Test samples of mixes submitted by Contractor.
   3. Perform specified sampling and testing of products in accordance with specified standards.
   4. Ascertain compliance of materials and mixes with requirements of Contract Documents.
   5. Promptly notify Architect/Engineer and Contractor of observed irregularities or non-conformance of Work or products.
   6. Perform additional tests required by Architect/Engineer.
   7. Attend preconstruction meetings and progress meetings.

I. Agency Reports: After each test, promptly submit copies of report to Owner/Construction Manager/Architect/Engineer and to Contractor. When requested by Architect/Engineer, provide interpretation of test results. Include the following:
   1. Date issued.
   2. Project title and number.
   3. Name of inspector.
   4. Date and time of sampling or inspection.
   5. Identification of product and specifications section.
   6. Location in Project.
   7. Type of inspection or test.
   8. Date of test.
   9. Results of tests.

J. Limits On Testing Authority:
   1. Agency or laboratory may not release, revoke, alter, or enlarge on requirements of Contract Documents.
   2. Agency or laboratory may not approve or accept any portion of the Work.
   3. Agency or laboratory may not assume duties of Contractor.
   4. Agency or laboratory has no authority to stop the Work.

1.08 MANUFACTURERS' FIELD SERVICES

A. When specified in individual specification sections, require material or product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, start-up of equipment,
test, adjust and balance of equipment as applicable, and to initiate instructions when necessary.

B. Submit qualifications of observer to Owner/General Contractor/Architect/Engineer 30 days in advance of required observations. Observer subject to approval of Owner.

C. Report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.

PART 2 PRODUCTS - Not Used.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify existing site conditions and substrate surfaces are acceptable for subsequent Work. Beginning new Work means acceptance of existing conditions.

B. Verify existing substrate is capable of structural support or attachment of new Work being applied or attached.

C. Examine and verify specific conditions described in individual specification sections.

D. Verify utility services are available, of correct characteristics, and in correct locations.

3.02 PREPARATION

A. Clean substrate surfaces prior to applying next material or substance.

B. Seal cracks or openings of substrate prior to applying next material or substance.

C. Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying new material or substance in contact or bond.

END OF SECTION
PART 1 GENERAL

1.01 SECTION INCLUDES
   A. Temporary Controls: Barriers, protection of the Work, and water control.
   B. Construction Facilities: Progress cleaning.

1.02 RELATED SECTIONS
   A. Section 01 70 00 - Contract Closeout: Final cleaning.

1.03 BARRIERS
   A. Provide barriers to prevent unauthorized entry to construction areas to allow for Owner's use of site, and to protect existing facilities and adjacent properties from damage from construction operations and demolition.
   B. Provide barricades and covered walkways required by governing authorities for public rights-of-way and for public access to existing building.
   C. Provide protection for plant life designated to remain. Replace damaged plant life.
   D. Protect non-owned vehicular traffic, stored materials, site and structures from damage

1.04 PROTECTION OF INSTALLED WORK
   A. Protect installed Work and provide special protection where specified in individual specification Sections.
   B. Provide temporary and removable protection for installed Products. Control activity in immediate work area to minimize damage.
   C. Provide protective coverings at walls, projections, jambs, sills, and soffits of openings.
   D. Protect finished floors, stairs, and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects, by protecting with durable sheet materials.
   E. Prohibit traffic or storage upon waterproofed or roofed surfaces. If traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer.
   F. Prohibit traffic from landscaped areas.

1.05 SECURITY
   A. Provide security and facilities to protect Work, and existing facilities, and Owner's operations from unauthorized entry, vandalism, or theft.
   B. Coordinate with Owner's security program.

1.06 PROGRESS CLEANING
   A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.
B. Remove debris and rubbish from pipe chases, plenums, attics, crawl spaces, and other closed or remote spaces, prior to enclosing the space.

C. Broom and vacuum clean interior areas prior to start of surface finishing, and continue cleaning to eliminate dust.

D. Remove waste materials, debris, and rubbish from site weekly and dispose off-site.

1.07 SITE CONDITIONS

A. Field Measurements and Material Quantities:
   1. Contractor shall have SOLE responsibility for accuracy of all measurements, estimates of material quantities and sizes, and site conditions that will affect work including but not limited too: Field measurements and material quantities.

B. Existing Conditions:
   1. Building space directly under roof area covered by this specification will be utilized by on-going operations.
   2. Access to roof shall be as outlined in pre-construction meeting.
   3. Move air-conditioning condensing units and other equipment as required to install roofing materials complete and in accordance with plans and specifications. When units and equipment are to be moved, they shall be carefully disconnected and removed to a protected area so as not to damage any part or component thereof. Reconnect units in such a way that they are restored to a prior work operating condition. Guard against dust, dirt and odors from entering the building during HVAC equipment relocation by field fabricating temporary covers and/or seals.
   4. A mechanical and/or electrical company licensed to perform such work shall perform all disconnection and re-connection. Subcontractor shall include in his price, cost for adjustments to roof drains to appropriate elevations to conform to new roof specifications. Work including new drain installation shall be performed by licensed plumbing company as pre-qualified in Washington County.
   5. All work shall be the responsibility of the roofing contractor unless otherwise noted. All work shall be considered that of what is necessary to complete the Scope of Work as written above.
   6. Existing roof top equipment shall NOT be set upon, used as a work bench or shelf to storage materials. Clean asphalt and adhesives from units upon completion of work.

C. Waste Disposal:
   1. Do not re-use, re-cycle or dispose of material manufacturer’s product containers except in accordance with all applicable regulations. The user of manufactured products is responsible for proper use and disposal of product containers.

D. Safety Requirements:
   1. All application, material handling, and associated equipment shall conform to and be operated in conformance with OSHA safety requirements. Contractor and subcontractors shall follow OSHA and Owner safety programs.
   2. Comply with federal, state, local and Owner fire and safety requirements.
   3. Advise project superintendent whenever work is expected to be hazardous to Owner, employees, and/or operators.
   4. A crewman with two-way communication (i.e., radio, mobile phone) shall be maintained by the contractor as a floor area guard whenever tear-off work is being conducted and when roof decking is being repaired or replaced. Aisle
ways shall have traffic cones and safety tape put up to warn and/or divert personnel from walking beneath areas under construction. Floor guard shall be maintained until base ply is completely installed.

5. The contractor, whenever power tools, roofing kettles, fuels, solvents, torches, and open flames are being used shall maintain fire extinguishers within easy access.

6. Roofing contractor is required to have an OSHA approved fall protection plan in place prior to the start of work. The roofing contractor shall include in his proposal all safety railing and barricades to protect his crews. The roofing contractor shall present a safety plan prior to the pre-construction meeting. All fall protection shall conform to state and federal regulations as outlined in OSHA CODE OF FEDERAL REGULATION 29 PART 1926.500 SUB PART M. The awarded roofing subcontractor shall submit a safety plan to the Contractor for submittal to the Owner containing to each item listed below as it pertains to the specific project.

E. Fall Protection: Fall protection is required whenever subcontractors are working on a surface that has an unprotected side or edge that is six (6) feet or more above a lower level. An unprotected edge is one that has a parapet wall that is less than 39 inches in height. The slope of the roof dictates which fall protection system or systems may be used.

1. Low Slope Roofs - (Slope is less than or equal to 4 in 12.) On low slope roofs, employees shall be protected from falling by guardrail systems, personal fall arrest systems, or a combination of warning line system and guardrail system, or warning line system and personal fall arrest system, or warning line system and safety monitoring system. On roofs 50 feet or less in width, the use of a safety monitoring system alone is permitted.

2. Steep Roofs - (Slope is greater than 4 in 12.) On steep roofs, employees shall be protected from falling by guardrail systems with toe boards or personal fall arrest systems.

3. Warning Line System
   a. When mechanical equipment (mechanical equipment meaning all motor or human-propelled, wheeled equipment used for roofing work except wheelbarrows and mop carts) is not being used, the warning line shall be erected no less than six (6) feet from the roof edge.
   b. When mechanical equipment is being used, the warning line shall be erected not less than six (6) feet from the roof edge that is parallel to the direction of mechanical equipment operation and not less than ten (10) feet from the roof edge, perpendicular to the direction of the mechanical equipment operation.
   c. Stanchions shall be set not further than 12 feet apart.
   d. Warning lines shall be a height of 39 inches at the highest point and 34 inches at the lowest point, including sag. They shall be flagged at not more than six (6) foot intervals with high visibility material.
   e. All employees working outside the warning line and within six (6) feet of the roof edge must wear a full safety harness with the "0" ring located in the rear. A six (6) foot shock-absorbing lanyard with rollout protection also must be used. This lanyard is to be located between the lifeline and the harness. In cases where work outside the warning line is to be performed, a Safety Monitoring System or an approved OSHA fall protection system may be used. (See section below)
F. Safety Monitoring System
   1. A documented competent person monitors the safety of all employees on a roofing or sheet metal crew and warns them when it appears to the monitor that they are unaware of a hazard or are acting in an unsafe manner. The competent person must be on the same roof as, and within visual sighting distance of, the employees and must be close enough to verbally communicate with the employees.
   2. Only used on low slope roofs that are 50 feet or less in width if no other fall prevention system is installed. Can be used on low slope roofs of any width if combined with a warning line system.
   3. No mechanical equipment shall be used with this system.

G. Guardrail Systems
   1. Top edge of top rail shall be 42 inches plus or minus 3 inches above the working surface.
   2. Mid-rails are required if there is no wall or parapet wall at least 21 inches higher. When used, mid-rails shall be installed at a height midway between the top edge of the guardrail and the working level.
   3. Guardrail posts shall be at least two (2) inch by four (4) inch lumber spaced not more than eight (8) feet apart on centers.
   4. The top rail shall be at least two (2) by four (4) inch lumber. The intermediate rail shall be at least one (1) inch by six (6) inch lumber.
   5. Toe boards shall be a minimum of 3-1/2 inches in vertical heights.
   6. When guardrail systems are used at hoisting areas, a chain, gate, or removable guardrail section shall be placed across the access opening between guardrail sections when hoisting operations are not taking place. When guardrail systems are used at holes or skylights, they shall be erected on all unprotected sides or edges of the hole.
   7. When guardrail systems are used at holes or skylights, they shall be erected on all unprotected sides or edges of the hole.
   8. When guardrail systems are used around holes used for ladder access, they shall be provided with a gate or be so offset that a person cannot walk directly into the hole.
   9. Manila, plastic or synthetic rope used for top rails or mid-rails shall be inspected as frequently as necessary to ensure that it continues to meet OSHA strength requirements.

H. Catch Platforms
   1. Catch platforms consist of ladder jack scaffolding with guardrails, mid-rails and toe boards or welded tube scaffolding with guardrails, mid-rails and toe boards.
2. Both of the above scaffolds must have platform that extend two (2) feet wide or better beyond the eave with no gap.

I. Personal Fall Arrest System
   1. Only full body harnesses with either shock-absorbing lanyard or lifelines, or a combination thereof, shall be used when required. All snap hooks shall be of the locking variety.
   2. Personal fall arrest systems shall be rigged such that employees can neither free-fall more than six (6) feet or contact any lower level.
   3. Self-retracting lifelines shall automatically limit free-fall distance to two feet or less.

J. Covers
   1. Cover for holes in floors, roofs, and other surfaces shall be capable of supporting, without failure, at least twice the weight of employees, equipment and materials that may be imposed on the cover at any one time.
   2. Covers shall be secured when installed to prevent accidental displacement by the wind, equipment or employees.
   3. All covers shall be color-coded or marked with the work "HOLE" or "COVER".
   4. Covers shall not be stood on, sat on, nor have any materials placed upon them.

K. Environmental Requirements:
   1. Do not work in rain, snow, or in presence of water.
   2. Do not work in temperatures below 40 degrees F.
   3. Do not install materials marked "KEEP FROM FREEZING" when daily temperatures are scheduled to fall below 40 degrees F.
   4. Do not perform masonry work below 40 degrees F.
   5. Remove any work exposed to freezing.
   6. The roofing contractor will use some or all of the following methods to minimize disruptions to building occupants and operations due to odor and will be performed at no additional cost to the Owner.
      a. Divert air intake from work area by attaching scoops or temporary ductwork.
      b. Temporarily shut down or block air intakes.
      c. Install temporary charcoal filters.
      d. Add odor reducing additive to asphalt tanker if hot asphalt is used.

L. Security Requirements:
   1. Comply with Owner security requirements.
   2. Provide Owner with current list of accredited persons.

M. Temporary Sanitary Facilities:
   1. The roofing contractor shall furnish, install, and maintain temporary sanitary facilities for employee use during project construction. The suitable location will be determined at the pre-construction meeting. Remove on project completion.
   2. Place portable toilets in conformance with applicable laws, codes, and regulations.

N. Odors:
   1. Contractor shall mitigate all odors from roofing operations from penetrating the school building including, but not limited to the following:
a. Keep building doors and windows closed at all times, coordinate with school principal.
b. The use of adhesive and other liquid roof components shall be down wind of any air intakes and set tankers (if hot asphalt is used) in down wind location.
c. Shut down of all adjacent HVAC/RTU’s units; cover or seal all intakes and exhaust air opening; and provide charcoal filters secured to vent openings.
d. Pay attention to wind direction and working accordingly to prevent odors from entering building.

O. Provide exhaust fans on interior to push/pull fumes out of building.

1.08 SITE SIGNAGE

A. The Contractor shall provide one sign of construction, design, and content shown on the drawing included at the end of Section 00 11 13 ‘Appendix A’. Background color shall be white, text shall be black, accent bands shall be yellow, and flag shall be red, yellow and black with white background. The lettering shall be Series C of Standard Alphabet for Highway Signs, Public Roads Administration, Federal Works Agency.
B. To obtain this construction sign that is compliant with the State of Maryland *IAC Administrative Procedures Guide* standard requirements, contact:

   Sign Shop
   Maryland Correctional Enterprises (MCE)
   Email: cwbehnke@dpscs.state.md.us
   Phone: 410-799-5102
   Fax: 410-799-7911

C. Sign location shall be approved by the Owner and Architect.

D. No other signs are allowed without Owner permission except those required by law.

E. Submit shop drawing indicating content, layout, lettering, color, foundation, structure, sizes, and grades of members.

F. Sign Materials:
   2. Sign Surfaces: Exterior grade plywood with medium density overlay, minimum 3/4 inches thick, standard large sizes to minimize joints.
   3. Rough Hardware: Galvanized or brass.
   4. Paint and Primers: Exterior quality, two coats; sign background of color as selected. Adequate to withstand weathering, fading, and chipping for duration of construction
   5. Contractor shall design sign and structure to withstand 60 miles/hr wind velocity.

G. Installation:
   1. Install project identification sign within 14 days after receipt of Notice to Proceed.
   2. Erect at designated location with high public visibility adjacent to main entrance to site.
   3. Erect supports and framing on secure foundation, rigidly braced and framed to resist wind loadings.
   4. Install sign surface plumb and level, with butt joints. Anchor securely.
   5. Paint exposed surfaces of sign, supports, and framing.

H. Maintenance: Maintain signs and supports clean, repair deterioration and damage.

I. Removal: When directed, remove signs, framing, supports, and foundations at completion of project and restore area.

1.09 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS

A. Remove temporary above grade or buried utilities, equipment, facilities, materials, prior to Substantial Completion inspection.

B. Remove underground installations to a minimum depth of 2 feet. Grade site as indicated.

C. Clean and repair damage caused by installation or use of temporary work.

D. Restore existing facilities used during construction to original condition. Restore permanent facilities used during construction to specified condition.
PART 2  PRODUCTS
- Not Used

PART 3  EXECUTION
- Not Used

END OF SECTION
PART 1   GENERAL

1.01   SECTION INCLUDES

A.   Products.

B.   Transportation and handling.

C.   Storage and protection.

D.   Product options.

E.   Substitutions.

1.02   RELATED SECTIONS

A.   Section 00 21 13 - Instructions to Bidders: Product options and substitution procedures.

B.   Section 01 40 00 - Quality Requirements: Product quality monitoring.

1.03   PRODUCTS

A.   Products: Means new material, machinery, components, equipment, fixtures, and systems forming the Work. Does not include machinery and equipment used for preparation, fabrication, conveying and erection of the Work. Products may also include existing materials or components required for reuse.

B.   Do not use materials and equipment removed from existing premises, except as specifically permitted by the Contract Documents.

C.   Provide interchangeable components of the same manufacturer, for similar components.

1.04   TRANSPORTATION AND HANDLING

A.   Transport and handle products in accordance with manufacturer's instructions.

B.   Promptly inspect shipments to assure that products comply with requirements, quantities are correct, and products are undamaged.

C.   Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage.

D.   Delivery of Materials:

1.   Deliver materials to job-site in new, dry, unopened, and well-marked containers showing product and manufacturers name.

2.   Deliver materials in sufficient quantity to allow continuity of work.

3.   Coordinate delivery with Owner.

4.   Do not order project materials or start work before receiving written notice to proceed.
E. Material Handling:
1. Handle materials to avoid bending, tearing, or other damage during transportation and installation.
2. Material handling equipment shall be selected and operated so as not to damage existing construction or applied roofing. Do not operate or locate material handling equipment in areas that will hinder smooth flow of vehicular or pedestrian traffic.

1.05 STORAGE AND PROTECTION

A. Store and protect products in accordance with manufacturer's instructions, with seals and labels intact and legible. Store sensitive products in weather-tight, climate controlled enclosures.

B. For exterior storage of fabricated products, place on sloped supports, above ground.

C. Provide off-site storage and protection when site does not permit on-site storage or protection.

D. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to avoid condensation.

E. Store loose granular materials on solid flat surfaces in a well-drained area. Provide mixing with foreign matter.

F. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.

G. Arrange storage of products to permit access for inspection. Periodically inspect to assure products are undamaged and are maintained under specified conditions.

H. Contractor shall assume full responsibility for the protection and safekeeping of products stored on premises.

I. Storage of Materials:
1. Store rolled goods on ends only.
2. Discard rolls, which have been flattened, creased, or otherwise damaged. Place materials on pallets. Store rolled goods on level pallets. Do not stack pallets.
3. Store materials marked "KEEP FROM FREEZING" in areas where temperatures will remain above 40 degrees F.
4. For insulation, remove plastic packaging shrouds. For felt rolls, slit the top of the plastic shrink-wrap only. Cover top and sides of all stored materials with tarpaulin (not polyethylene). Secure tarpaulin. Canvas tarpaulin only to be used for material protection.
5. Rooftop storage: Disperse material to avoid concentrated loading, verify exiting structural member location and loading requirements.
6. Do not store materials in open or in contact with ground or roof surface.
7. Store all materials on a raised platform covered with secured canvas tarpaulin (not polyethylene), top to bottom. Cover all materials when project is not in progress and maintain the ability at all times to cover the materials when required, such as during an unanticipated rain shower.
1.06 PRODUCT OPTIONS

A. Products Specified by Reference Standards or by Description Only: Any product meeting those standards or description.

B. Products Specified by Naming One or More Manufacturers: Products of manufacturers named and meeting specifications, no options or substitutions allowed.

C. Products Specified by Naming One or More Manufacturers with a Provision for Substitutions: Submit a request for substitution for any manufacturer not named.

1.07 SUBSTITUTIONS

A. The Instructions to Bidders, General Conditions to the Contract, and Supplemental Conditions to the General Conditions specify restrictions for submitting requests for Substitutions during the bidding period to requirements specified in this Section.

B. Substitutions may be considered when a product becomes unavailable through no fault of the Contractor.

C. Document each request with complete data substantiating compliance of proposed Substitution with Contract Documents and submit with the attached Request Form.

D. A request constitutes a representation that the Bidder:
   1. Has investigated proposed product and determined that it meets or exceeds the quality level of the specified product.
   2. Will provide the same warranty for the Substitution as for the specified product.
   3. Will coordinate installation and make changes to other Work which may be required for the Work to be complete with no additional cost to Owner.
   4. Waives claims for additional costs or time extension which may subsequently become apparent.

E. Substitutions will not be considered when they are indicated or implied on shop drawing or product data submittals, without separate written request, or when acceptance will require revision to the Contract Documents.

F. Substitution Submittal Procedure:
   1. Submit three copies of request for Substitution for consideration. Limit each request to one proposed Substitution.
   2. Submit shop drawings, product data, and certified test results attesting to the proposed product equivalence.
   3. The Architect/Engineer will notify Contractor, in writing, of decision to accept or reject request.

PART 2 PRODUCTS - Not Used

PART 3 EXECUTION - Not Used

END OF SECTION
REQUEST FOR SUBSTITUTION

DATE OF REQUEST: ________________________________________________

PROJECT: WCPS – Funkstown Elementary School Roof Replacement
   WCPS Bid No. 2017-11 / BFM Project No. 16053

CONTRACTOR: ________________________________________________-

TELEPHONE NO:___________________________________________________

FACSIMILE NO:____________________________________________________

CONTACT: ________________________________________________-

1. Item for which substitution is being requested:

_________________________________________________________________________

2. Reference Specification Section:_______________________________________________

3. Reference Drawing:_________________________________________________________

4. Reason for Substitution Request:_______________________________________________
   ________________________________________________________________________

5. Product Comparison:

   Submit three copies of shop drawing, product data, color samples, utility requirements and certified test results attesting to the proposed product equivalence.

   a. ____ Data substantiating compliance of proposed substitution with contract documents.
   b. ____ Product identification, manufacturer’s name, address and telephone number.
   c. ____ Manufacturer’s literature, warranty.
   d. ____ Full color selection, showing colors Architect may select without additional cost.
   e. ____ Samples
   f. ____ Warranty
   g. ____ References of product in use.
   h. ____ Itemized comparison of proposed substitution with product or method specified. Highlight all differences from specified item.
   i. ____ All items listed Section 01 60 00-1.7.
   j. ____ Cover letter stating benefits or equality of substitution and reason for substitution request.

6. If request is being submitted after the receipt of bids, attach price quotations of specified product and substituted products.
PART 1 GENERAL

1.01 SECTION INCLUDES
   A. Closeout procedures.
   B. Final cleaning.
   C. Adjusting.
   D. Project record documents.

1.02 RELATED SECTIONS
   A. Section 01 50 00 - Construction Facilities and Temporary Controls: Progress cleaning.
   B. Section 01 74 00 - Warranties and Bonds.

1.03 CLOSEOUT PROCEDURES
   A. Submit written certification that Contract Documents have been reviewed, Work has been inspected, and that Work is complete in accordance with Contract Documents and ready for Architect/Engineer's inspection.
   B. Provide submittals to Architect/Engineer that are required by governing or other authorities.
   C. Submit final Application for Payment identifying total adjusted Contract Sum, previous payments, and sum remaining due.
   D. Owner will occupy portions of the building as specified in Section 01 01 00.

1.04 FINAL CLEANING
   A. Execute final cleaning prior to final inspection.
   B. Clean equipment and fixtures to a sanitary condition.
   C. Clean debris from roofs, gutters, downspouts, and drainage systems.
   D. Clean site; sweep paved areas, rake clean landscaped surfaces disturbed by construction.
   E. Remove waste and surplus materials, rubbish, and construction facilities from the site.

1.05 ADJUSTING
   A. Adjust operating Products and equipment to ensure smooth and unhindered operation.
1.06 PROJECT RECORD DOCUMENTS

A. Maintain on site, one set of the following record documents; record actual revisions to the Work:
   2. Specifications.
   3. Addenda.
   4. Change Orders and other Modifications to the Contract.
   5. Reviewed shop drawings, product data, and samples.
   6. Material Safety Data sheets for each material used.

B. Store Record Documents separate from documents used for construction.

C. Record information concurrent with construction progress.

D. Specifications: Legibly mark and record at each Product section description of actual Products installed, including the following:
   1. Manufacturer's name and product model and number.
   2. Product substitutions or alternates utilized.
   3. Changes made by Addenda and Modifications.

E. Record Documents and Shop Drawings: Legibly mark each item to record actual construction:
   1. Field changes of dimension and detail.
   2. Details not on original Contract Drawings.

F. Delete Architect/Engineer title block and seal from all documents.

G. Submit documents and bond material safety data sheets to Architect/Engineer with claim for final Application for Payment.

1.07 OPERATION AND MAINTENANCE DATA

A. Provide data for roofing system.

B. Submit three (3) sets prior to final inspection, bound in 8-1/2” x 11”, three-ring binders with durable plastic covers. Provide electronic copy of drawings in both .pdf and .dwg formats. A CD with the O&M Manuals shall be provided also.

C. Each binder shall be labeled with the school name and the title, “Record Information Booklet.”

D. Make-up of the booklet:
   1. Part 1: Directory, listing names, addresses, and telephone number of Consultant and Contractor.
   2. Part 2: Maintenance instruction arranged by system. For each system, give names, addresses, and telephone numbers of subcontractors and suppliers. List:
      a. Appropriate design criteria.
      b. Maintenance instructions, equipment.
   3. Shop drawings and product data.

PART 2 PRODUCTS Not Used

PART 3 EXECUTION Not Used

END OF SECTION
PART 1  GENERAL

1.01  SECTION INCLUDES

A.  Preparation and submittal.
B.  Time and schedule of submittals.
C.  Warranty.

1.02  RELATED SECTIONS

A.  Section 01 70 00 - Contract Closeout: Contract closeout procedures.
B.  Individual Specifications Sections: Warranties required for specific products or Work.

1.03  FORM OF SUBMITTALS

A.  Bind in commercial quality, 8-1/2 x 11 inch three “D”-ring ‘clear-vue’ binders with hardback, cleanable, and transparent plastic covers and side binder.
B.  Label cover and side of each binder with typed or printed title WARRANTIES, with title and date of Project; name, project number; address and telephone number of Contractor; and name of Architect.
C.  Table of Contents: Neatly typed, in the sequence of the Table of Contents of the Project Manual, with each item identified with the number and title of the specification Section in which specified, and the name of the product or work item.
D.  Directory: Provide a directory which indicates names, addresses and telephone/fax numbers of Owners, Consultants, General Contractors, Subcontractors, and Major Suppliers. Include name of contact person for each entry.
E.  Separate each warranty or bond with index tab sheets keyed to the Table of Contents listing. Provide full information, using separate typed sheets as necessary. List Subcontractor, supplier, and manufacturer, with name, address, and telephone number of responsible principal. Include information regarding maintenance and operations of equipment and or materials as may be required by the specifications or manufacturer.

1.04  PREPARATION OF SUBMITTALS

A.  Obtain warranties, executed in duplicate by responsible Subcontractors, suppliers, and manufacturers, within ten days after completion of the applicable item or work. Except for items put into use with Owner's permission, the date of beginning of time of warranty shall be the Date of Substantial Completion.
B.  Verify that documents are in proper form, contain full information.
1.05 TIME OF SUBMITTALS

A. For equipment or component parts of equipment put into service during construction with Owner's permission, submit documents within ten days after acceptance.

B. Provide draft copy of warranties and bonds for review by consultant no later then time of 50% project completion.

C. Make other submittals within ten days after Date of Substantial Completion, prior to final Application for Payment.

D. For items of Work when acceptance is delayed beyond Date of Substantial Completion, submit within ten days after acceptance, listing the date of acceptance as the beginning of the warranty period.

1.06 WARRANTY

A. Guarantee:
1. Upon project completion and Owner acceptance, effective upon complete payment the Subcontractor shall issue a guarantee against defective workmanship and materials for a period of two (2) years.
2. Manufacturer’s standard 25 year No Dollar Limit Quality Assurance total system warranty.
   a. Manufacturer will warrant all materials installed. No exclusions.
   b. Manufacturer will inspect the roofing system in years 2, 5, 10, 15, and 20 and shall perform any preventative maintenance and housekeeping as necessary.
   c. Roof manufacturer will provide a written report with photographs with each inspection.
3. Roof manufacturer shall provide a full time inspector during actual performance of roof replacement per Section 01 01 00. The inspector shall be on site for two (2) 9 hour days for every 5 days worked when the superintendent is present.
4. Other warranties as noted per specification section.

PART 2 PRODUCTS
Not Used

PART 3 EXECUTION
Not Used

END OF SECTION
GENERAL

1.01 SUMMARY

A. Section Includes:
   1. Demolishing designated building equipment and fixtures.
   2. Cutting and alterations for completion of the Work.
   3. Protecting items designated to remain.
   4. Removing demolished materials.
   5. Hazardous material abatement.

B. Related Sections:
   1. Section 01 50 00 – Construction Facilities and Temporary Controls.

1.02 SUBMITTALS

A. Section 01 30 00 - Submittals: Requirements for submittals.

B. Demolition Schedule: Indicate overall schedule and interruptions required for utility and building services.

C. Shop Drawings:
   1. Indicate location of items designated for reuse and Owner’s retention.
   2. Indicate location and construction of temporary work.

1.03 CLOSEOUT SUBMITTALS

A. Section 01 70 00 – Contract Closeout: Requirements for submittals.

B. Project Record Documents: Accurately record actual locations of capped utilities, concealed utilities discovered during demolition, and subsurface obstructions.

C. Operation and Maintenance Data: Submit description of system, inspection data, and parts lists.

1.04 QUALITY ASSURANCE

A. Conform to applicable codes for demolition work, dust control, products requiring electrical disconnection and re-connection.

B. Conform to applicable codes for procedures when hazardous or contaminated materials are discovered.

C. Obtain required permits from authorities having jurisdiction.

D. Perform Work in accordance with State of Maryland and Washington County standards.

1.05 PRE-INSTALLATION MEETINGS

A. Section 01 03 90 – Coordination and Meetings: Pre-installation meeting.

B. Convene minimum one week prior to commencing work of this section.
1.06 SEQUENCING

A. Section 01 01 00 – Summary of Work: Requirements for sequencing.
B. Sequence demolition activities in accordance with the proposed project phasing.
C. Owner will conduct salvage operations before demolition begins to remove materials Owner chooses to retain.
D. Contractor to remove, store and reinstall existing equipment and fixtures where present on existing metal siding above windows and mansard roof and other locations.

1.07 SCHEDULING

A. Schedule Work to coincide with phasing.
B. Cooperate with Owner in scheduling noisy operations and waste removal that may impact Owners operation in adjoining spaces.
C. Coordinate utility and building service interruptions with Owner.
   1. Do not disable or disrupt building fire or life safety systems without three days prior written notice to Owner.
   2. Schedule tie-ins to existing systems to minimize disruption.
   3. Coordinate Work to ensure fire sprinklers, fire alarms, smoke detectors, emergency lighting, exit signs and other life safety systems remain in full operation in occupied areas.

1.08 PROJECT CONDITIONS

A. Conduct demolition to minimize interference with adjacent and occupied building areas.
B. Cease operations immediately if structure appears to be in danger and notify Architect/Engineer. Do not resume operations until directed.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

3.01 PREPARATION

A. Mark location and termination of utilities.
B. Erect, and maintain temporary barriers and security devices at locations indicated, including warning signs and lights, and similar measures, for protection of the public, Owner, and existing improvements indicated to remain.
C. Erect and maintain weatherproof closures for exterior openings.
D. Erect and maintain temporary partitions to prevent spread of dust, odors, and noise to permit continued Owner occupancy.
E. Prevent movement of structure; provide temporary bracing and shoring required to ensure safety of existing structure.
F. Provide appropriate temporary signage including signage for exit or building egress.

G. Do not close or obstruct building egress path.

H. Do not disable or disrupt building fire or life safety systems without 3 days prior written notice to Owner.

3.02 SALVAGE REQUIREMENTS

A. Owner has first rights of refusal for all equipment and materials.

B. Coordinate with Owner to identify building components and equipment required to be removed and delivered to Owner.

C. Tag components and equipment Owner designates for salvage.

D. Protect designated salvage items from demolition operations until items can be removed.

E. Carefully remove building components and equipment indicated to be salvaged.

F. Disassemble as required to permit removal from building.

G. Package small and loose parts to avoid loss.

H. Mark equipment and packaged parts to permit identification and consolidation of components of each salvaged item.

I. Prepare assembly instructions consistent with disassembled parts. Package assembly instructions in protective envelope and securely attach to each disassembled salvaged item.

J. Deliver salvaged items to Owner. Obtain signed receipt from Owner.

3.03 DEMOLITION

A. Conduct demolition to minimize interference with adjacent and occupied building areas.

B. Maintain protected egress from and access to adjacent existing buildings at all times.

C. Do not close or obstruct roadways and sidewalks without permits.

D. Cease operations immediately when structure appears to be in danger and notify Architect/Engineer and Owner.

E. Demolish in orderly and careful manner. Protect existing improvements, and supporting structural members.

F. Carefully remove building components indicated to be reused.
   1. Disassemble components as required to permit removal.
   2. Package small and loose parts to avoid loss.
   3. Mark components and packaged parts to permit reinstallation.
   4. Store components, protected from construction operations, until reinstalled.

G. Remove demolished materials from site except where specifically noted otherwise. Do not burn or bury materials on site.
H. Remove materials as Work progresses. Upon completion of Work, leave areas in clean condition.

I. Remove temporary Work.

3.04 HAZARDOUS MATERIALS

A. Owner is not aware of any hazardous materials on the roof. If any materials are present or found, Contractor shall remove in accordance with applicable standards and guideline for abatement.

1. If asbestos is found and removal and disposal occurs, roofing contractor or their subcontractor shall be State Certified for asbestos abatement.

END OF SECTION
PART 1 — GENERAL

1.01 SECTION INCLUDES
A. This section includes patching or repair of the existing cementitious wood fiber (tectum) plank decking.
B. Base Bid includes 1,000 s.f. of repair and 1,000 s.f. of replacement. If quantities exceeding adjustment

1.02 RELATED DOCUMENTS
A. Drawings and contract documents, including Section 01 01 00 - Summary of Work, apply to this section.

1.03 RELATED SECTIONS
A. Section 02 22 50 - Demolition
B. Section 05 50 00 - Metal Fabrication
C. Section 07 22 20 - Roof and Deck Insulation
D. Section 07 62 00 - Sheet Metal Flashing and Trim
E. Section 07 90 00 - Joint Sealers
F. Section 09 90 00 - Paints and Coatings

1.04 DELIVERY, STORAGE, AND HANDLING
A. Deliver the specified product in original, unopened containers with the manufacturer's name, labels, product identification, and batch numbers.
B. To insure dimensional stability, roof deck material must not more than 12 percent moisture content when delivered to job site.
C. Roof deck material shall be stored in adequate level blocking 6 inches minimum raised platform.
D. Decking must be protected from weather with waterproof coverings. Cover the bottom of stacks with moisture proof material and allow air circulation under cover to prevent condensation.
E. Edges and surfaces of decking shall be protected against marring, soil, and from damage during storage and erection.

1.05 JOB CONDITIONS
A. Environmental Conditions: Apply repair panels during periods of clear weather and in accordance with the manufacturer’s recommendations.

PART 2 — PRODUCTS

2.01 MATERIALS
A. All replacement panels shall match existing design and weight load capabilities. Standard panels shall be in either plank form with tongue and groove edges and square ends or in tile form with rabbeted edges and square or tongue and groove ends.
1. Tectum Roof Panels by Tectum Inc. - Newark, Ohio.
2. Approved equal by Owner.
PART 3 — EXECUTION

3.01 REPAIR PROCEDURES

A. Tectum roof deck shall be attached with heavy metal screws and 2 inch diameter washers approved by Tectum Inc. for the type of purlins.
   1. Minimum length for steel shall be 3/4 inches longer than deck thickness.
   2. Screws shall be sufficient length to penetrate wood 1-inch minimum.

3.02 INSTALLATION

A. Roof planks shall be cut to fit neatly at walls, parapets, curbs or other opening. All openings greater than 8 inches in either direction must have additional structural frame support. Subpurlins or channels must not be cut to make openings.

B. All ends and edges of decking must be continuously supported along the outside walls directly or by supplemental framing.

C. Roof planks shall be laid directly on joists with square cut ends butted tightly together. End joints in alternate rows shall be staggered and centered on supporting members. A driving block shall be used to insure tight joints and prevent damage to the plank.

D. All planks shall be attached to joists by a minimum of two screws per joist.

E. The plank shall be installed with tongue leading. Fasteners shall be installed as soon as plank is set, before anyone is allowed to walk on decking.

END OF SECTION
DIVISION 4

MASONRY
PART 1 GENERAL

1.01 SUMMARY
A. Section includes repair and re-pointing of masonry in the 1000 s.f. of the wall area above the roof deck. Quantities over or under the Base Bid quantities to be adjusted by Unit Price.
B. Caulking of masonry expansion/control joints.
C. Recondition steel support lintels at windows above roof line.

1.02 REFERENCES
A. American Concrete Institute:
   1. ACI 530 - Building Code Requirements for Masonry Structures.
   2. ACI 530.1 - Specifications for Masonry Structures.
B. Brick Industry Association (BAI).

1.03 SUBMITTALS
A. Section 01 30 00 - Submittals: Submittal procedures.
B. Shop Drawings: Indicate special supports for the work. Detail shoring and bracing and temporary or permanent support.
C. Product Data: Submit data on cleaning compounds and cleaning solutions, re-pointing materials and products.
D. Samples: Submit four samples of face brick units to illustrate color, texture, and extremes of color range to match existing.
E. Samples: Submit mortar samples matched to existing mortar color.
F. Manufacturer's Installation Instructions: Submit installation procedures for products selected for use, manufacturer's installation instructions, and perimeter conditions requiring special attention.

1.04 QUALITY ASSURANCE
A. Perform Work in accordance with ACI 530 and ACI 530.1 requirements.
B. Maintain one copy of each document on site.

1.05 QUALIFICATIONS
A. Manufacturer: Company specializing in manufacturing products specified in this section with minimum ten years documented experience.
B. Installer: Company specializing in performing Work of this section with minimum three years documented experience and having completed work.

1.06 PRE-INSTALLATION MEETINGS
A. Section 01 03 90 – Coordination and Meetings: Pre-installation meeting.
B. Convene minimum one week prior to commencing work of this section.
1.07 DELIVERY, STORAGE, AND HANDLING

A. Section 01 60 00 – Material and Equipment: Product storage and handling requirements.

B. Deliver masonry neatly stacked and tied on pallets. Store clear of ground with adequate waterproof covering.

C. Store sand blasting, acid solution, restoration cleaner materials in manufacturer's packaging.

D. Store mortar ingredients in manufacturer's packaging, or when delivered loose, with adequate waterproof covering.

E. Delivery of Materials:
   1. Deliver materials to job-site in new, dry, unopened and well-marked containers showing product and manufacturers name.
   2. Deliver materials in sufficient quantity to allow continuity of work.
   3. Coordinate delivery with project superintendent.

F. Storage of Materials:
   1. Store materials marked “KEEP FROM FREEZING” in areas where temperatures will remain above 40 degrees F.
   2. Do not store materials in open or in contact with ground or roof surface.
   3. Store all materials on a raised platform covered with secured canvas tarpaulin (not polyethylene), top to bottom. Cover all materials when project is not in progress and maintain the ability at all times to cover the materials when required, such as during an unanticipated rain shower.
   4. Contractor shall assume full responsibility for the protection and safekeeping of products stored on premises.
   5. Store cementitious materials on elevated platforms, under cover, and in a dry location. Do not use cementitious materials that have become damp.
   6. Store hydrated lime in manufacturer's original and unopened containers. Discard lime if containers have been damaged or have been opened for more than two days.
   7. Store lime putty covered with water in sealed containers.
   8. Store sand where grading and other required characteristics can be maintained and contamination avoided.

1.08 ENVIRONMENTAL REQUIREMENTS

A. Section 01 60 00 – Material and Equipment.

B. Cold Weather Requirements: In accordance with ACI 530.1 when ambient temperature or temperature of masonry units is less than 40 degrees F.

C. Hot Weather Requirements: In accordance with ACI 530.1 when ambient temperature is greater than 100 degrees F or ambient temperature is greater than 90 degrees F with wind velocity greater than 8 mph.

D. Environmental requirements:
   1. Do not work in rain, snow, or in presence of water.
   2. Do not work in temperatures below 40 degrees F.
   3. Do not install materials marked “KEEP FROM FREEZING” when daily temperatures are scheduled to fall below 40 degrees F.
   4. Do not perform masonry work below 40 degrees F.
   5. Remove any work exposed to freezing.
6. Do not work in windy or moderately breezy conditions unless the area is protected to prevent overspray conditions. Contractor shall be responsible for any costs mitigate over spray complaints.

7. Coordinate with superintendent when volatile materials are to be used near air ventilation intakes so owner can use some or all of the following methods to minimize disruptions to building occupants and operations:
   a. Divert air intake from work area by attaching scoops or temporary ductwork.
   b. Temporarily shut down or block air intakes.
   c. Provide make-up air or intake air from sources away from work area.

1.09 SEQUENCING
   A. Section 01 01 00 - Summary: Work sequence.
   B. Perform steam cleaning without chemicals to initially clean the brick parapet before re-pointing begins; to remove excess dirt, grim, and other foreign substances.
   C. Perform re-pointing before chemically cleaning masonry surfaces.

1.10 SCHEDULING
   A. Section 01 03 90 – Material and Equipment: Coordination and project conditions.
   B. Perform cleaning and washing to exterior masonry between hours of 7 AM to 5 PM.

PART 2 PRODUCTS

2.01 GENERAL
   A. Comply with quality control, references, specifications, and manufacturer's data. Products containing asbestos are prohibited on this project. Use only asbestos-free products.
   B. Use products with personal protection. User must read container label and material safety data sheets prior to use.

2.02 MASONRY RESTORATION AND CLEANING
   A. Mortar Manufacturers: (Type N Mortar)
      1. Flamingo.
      2. Lehigh Portland Cement
      3. Essroc.
      4. Lehigh Portland Cement
      5. Substitutions: Section 01 60 00 - Product Requirements.

2.03 COMPONENTS
   A. Masonry components:
      2. Masonry Sand: ASTM C 144-93. Shall contain no more than 0.5% lightweight aggregate particles. Shall be free of coal, grains, wood, and other organic impurities. Shall be washed and free of expansive clay.
      3. Hydrated lime: ASTM C 207-91(1992), Type S, non-air-entrained. Do not use unslaked lime. Follow manufacturer's written hydration procedures if lime putty is used.
6. Mortar coloring material: Inert, non-fading, alkali fast oxides, finely ground, made especially for cement/lime mortars, to match existing color. Color quantity no more than 6% by weight. Match existing color. Actual color samples must be approved before work can begin.
7. Face brick: Use existing brick. If needed, new brick to match existing in sizes, texture, and color, provide samples for selection by Architect / Owner.
10. Bonding Primer Agent: Equal to Sika SikaLatex R: acrylic polymer latex, on-component, penetrating non-re-emulsifiable general purpose admixture.

B. Cleaners:
1. Limestone and Masonry Pre-wash: Equal to Sure Klean 766 Limestone and Masonry Pre-wash.
2. Afterwash: Equal to Sure Klean Limestone and Masonry Afterwash.

C. Joint Sealants
1. Sealants: Urethane Sealants per Section 07 90 00.
2. Primer for sealants:
   a. Primer for concrete or masonry surfaces prior to applying urethane sealants: Primer #1.
   b. Primer for metal surfaces prior to applying urethane sealants: Non-Porous Primer
   c. Approved equal by Owner.

D. Paint per Section 09 90 00.

PART 3 EXECUTION

3.01 EXAMINATION
A. Section 01 03 90 – Material and Equipment: Coordination and project conditions.
B. Verify surfaces to be cleaned or restored are ready for work of this section.
C. Do not begin work until all unsatisfactory conditions are corrected. Beginning work constitutes acceptance of conditions.

3.02 PREPARATION
A. Protect elements surrounding work of this section from damage or disfiguration.
B. Immediately remove stains, efflorescence, or other excess resulting from work of this section.
C. Protect roof membrane and flashings from damage. Lay ½ inch plywood on roof surfaces over full extent of work area and traffic route.
D. Provide sand dams to divert flowing water to exterior drains.
E. Carefully remove and store fixtures, fittings, finishing hardware, and accessories.
F. Close off, seal, mask, and board up areas, landscaping, materials, and surfaces not receiving work of this section to protect from damage.
G. Construct dust proof and weatherproof partitions to close off occupied areas.
3.03 GENERAL WORKMANSHIP

A. All work performed by subcontractor shall conform to this specification.

B. The presence and activity of the Manufacturer's representative, Architect's representative, and/or Owner's representative shall in no way relieve Subcontractor of contract responsibilities or duties.

C. Substrate temperature shall be within 50°F to 110°F for product application. At no time shall temperature exceed 110°F during application and cure.

D. Re-pointing work as described herein shall not proceed at an ambient temperature below 40°F or above 95°F without prior written approval from the Architect.

E. Re-pointing work shall not be performed during rain or inclement weather or when such weather is imminent.

F. Perform masonry restoration work in the following sequence:
   1. Remove plant growth.
   2. Steam clean areas to be addressed by work of this section.
   3. Repair existing masonry, including replacing existing masonry with new masonry materials.
   4. Rake out joints that are to be re-pointed.
   5. Inspect for open mortar joints and repair before cleaning to prevent the intrusion of water and other cleaning materials into the wall.
   6. Clean masonry surfaces.
   7. Point mortar joints.
   8. Install reglet or thru wall flashing as necessary.
   9. As scaffolding is removed, patch anchor holes used to attach scaffolding. Patch holes in masonry units.

3.04 SURFACE PREPARATION

A. Vertical surfaces must be cleaned of laitance, dirt, dust, oil, grease efflorescence, alkali coatings and all other contaminants. Replace any missing, loose, weak or soft mortar.

B. The surface of joints to receive sealants shall be free of all frost, condensation and moisture. Oil, grease dirt, chalk, particles of mortar, dust, loose mill scale, caulking and other foreign substances shall be removed from surfaces of joints to be in contact with the sealant. Oil and grease shall be removed with solvent and surfaces shall be wiped dry with clean clothes. All surfaces shall be ground free of existing sealants, caulking and abraded to clean mortar or stone.

C. Remove loose particles present or resulting from grinding, abrading or blast cleaning by sweeping particles out with a dry brush, blowing out joints with oil free compressed air or by vacuuming joints prior to solvent cleaning.

D. Clean only as much area that can be primed, packed and caulked in a single day.

3.05 BRICK REMOVAL AND REPLACEMENT

A. At locations indicated, remove bricks for through-wall application. Carefully demolish or remove entire units from joint to joint, without damaging surrounding masonry, in a manner that permits replacement with full-size units. Install new 24 gauge stainless steel through-wall and all joints soldered. Turn up through-wall minimum 4”. At top of stainless steel through-wall flashing, install ice and water shield membrane and terminate the top of ice and water shield with termination bar fastened every 6”. Caulk top of term bar.
B. Rebuilding: Cut out damaged and deteriorated mortar with care in manner to prevent damage to adjacent remaining materials. Cut away loose or unsound mortar to provide firm and solid bearing for new work.

C. When removing single bricks, remove material from center of brick and work toward outside edges.

D. Support and protect remaining masonry that surrounds removal area. Maintain flashing, reinforcement, lintels, and adjoining construction in an undamaged condition.

E. Notify Owner of unforeseen detrimental conditions including voids, cracks, bulges, and loose masonry units in existing masonry backup, rotted wood, rusted metal, and other deteriorated items.

F. Remove in an undamaged condition as many whole bricks as possible.

G. Remove mortar, loose particles, and soil from brick by cleaning with hand chisels, brushes, and water.

H. Store brick for reuse, as indicated.

I. Deliver cleaned brick not required for reuse to Owner, unless otherwise directed.

J. Clean bricks surrounding removal areas by removing mortar, dust, and loose particles in preparation for replacement.

K. Install replacement brick into bonding and coursing pattern of existing brick. If cutting is required, use a motor-driven saw designed to cut masonry with clean, sharp, unchipped edges.

L. Lay replacement brick with completely filled bed, head, and collar joints. Butter ends with sufficient mortar to fill head joints and shove into place. Wet both replacement and surrounding bricks that have ASTM C 67 initial rates of absorption (suction) of more than 30 g/30 sq. in. per min. Use wetting methods that ensure that units are nearly saturated but surface is dry when laid. Maintain joint width for replacement units to match existing joints.

M. Tool exposed mortar joints in repaired areas to match joints of surrounding existing brickwork.

N. Rake out mortar used for laying brick before mortar sets and point new mortar joints in repaired area to comply with requirements for re-pointing existing masonry, and at same time as re-pointing of surrounding area.

3.06 RE-POINTING

A. Prepare re-pointing areas using hand tools or power tools.

B. Remove all loose mortar from joint to a depth of approximately 5/8". Remove any exposed cavity tie back steel from surface and loose brick.

C. Remove all mortar that has a visible crack on one side of the joint.

D. Remove loose particles present or resulting from grinding, chipping or raking by oil free compressed air.

E. Mix mortar:
   1. Use paddle batch mixer. Begin mixing by combining 3/4 of the needed water, all of the Portland cement and hydrated lime and 2 of the sand. Mix for at least three and not more than five minutes. Gradually add sand, water, and mix to obtain uniform visual and physical characteristics. Mixed consistency, molded ball into hand.
2. Use mortar after adding final water to bring to working consistency. Pre-hydrate mortar according to manufacturer’s directions if lime putty is used.
3. Discard mortar not used within 2-1/2 hours of original mixing time.
4. Re-tempering mortar with additional water is not permitted.

F. Dampen brickwork to be pointed.
G. Tuck re-pointing mortar into prepared joint in layers, tightly compress. Fill joint in this manner until full and surface is slightly recessed from brick face.
H. When surface layer is thumbprint hard, tool joints. Match the surface configuration of the existing mortar, or use a 5/8" rounded jointing tool forming concave joint. Avoid tool burn or slicking.
I. Clean excess material from all surfaces.

3.07 INSTALLATION OF BACKER-ROD MATERIAL
A. When using backup material comprised of tubular or rod stock, avoid lengthwise stretching of the material. Do not twist or braid backer material at windows and louvers at penthouses.

B. Installation tool:
1. Do not puncture the exterior skin or surface of the backer material.
2. For installation of backup material, provide a blunt-surfaced tool of wood or plastic, having shoulders designed to ride on the adjacent finished surface and a protrusion of the required dimensions to assure uniform depth of backup material below the sealant.
3. Do not, under any circumstance, use a screwdriver or similar tool for this purpose.
4. Using the approved tool, smoothly and uniformly place the backup material to the depth indicated on the drawings or otherwise required, compressing the backer material 25% to 50% and securing a positive fit. Do not insert the depth of the backer material beyond 1/2".

3.08 INSTALLATION OF SEALANTS
A. At windows and louvers at penthouses or vertical or horizontal control joints or other joints identified above the roof line, prior to start of installation of each joint, type according to the details on the drawings and verify that the required proportion of width of joint to depth of joint ration has been secured.
1. Minimum size of joint shall be four times the anticipated movement.
2. Joint depth to be 1/4 inch for joints 1/4 inch to 2 inch in width.
3. Maximum joint size approximately 1 1/4" width x 3/8" depth in a single application.

B. Equipment
1. Apply sealant under pressure with power actuated hand gun or manually operated hand gun, or by other appropriate means.
2. Use guns with a nozzle of proper size, and providing sufficient pressure to completely fill the joints as designed.
3. If multi-component sealants are used, a two blade mixing paddle is required in the mixing process.

C. Thoroughly and completely mask joints where the appearance of primer or sealant on adjacent surfaces would be objectionable.
D. Temperature: Install all work of this section when substrate surface temperature is above 40°F and below 140°F unless the applicator obtains prior approval from the sealant manufacturer to install material outside of this temperature range.

E. Moisture: Do not apply work of this section on surfaces which are wet, damp, or have frost.

F. Install the sealant in strict accordance with the manufacturer's recommendations, thoroughly filling joints to the recommended width and depth.

G. Dry tool exposed joints to force material against backing material causing the caulking to obtain full surface contact with the joint interfaces. Finished joint will have a slightly concave surface, be uniform and neatly finished.

H. Cleaning up:
   1. Remove masking tape immediately after joints have been tooled.
   2. Keep clean adjacent surfaces free from excess sealant as the installation progresses, using solvent or cleaning agent recommended by the sealant manufacturer.
   3. Upon completion of the work of this section, promptly remove from the job site all debris, empty containers, and surplus material derived from this portion of the work.

3.09 RE-CONDITIONING OF EXISTING LINTELS

A. Clean all dirt, scale, rust etc. from exposed underside of lintels in walls above roof deck. Repaint per Section 09 90 00.

3.10 RESTORATION CLEANING

A. Cleaning Existing Masonry:
   1. Prewash:
      a. Pre-wet existing masonry and limestone surface with clean water.
      b. Apply a heavy coating of the limestone and masonry prewash by using a roller.
      c. Let the prewash stay on the surface 30-60 minutes. Longer dwell times may be required with lower temperatures. Do not let material dry on surface.
      d. Pressure rinse, making sure to flush each portion of the masonry surface with concentrated water pressure. The best combination of rinsing pressure and water volume is provided by masonry washing equipment generating 400-1000 psi with a water flow rate of 6-8 gallons per minute delivered through a 15-45 degree fan spray tip. Equipment should be adjustable to reduce water flow rate and rinsing pressure as required for controlled cleaning of more sensitive surfaces.
      e. Brick, sandstone and other noncalcareous masonry: Immediately apply a solution for Sure Klean Limestone and Masonry Afterwash or Sure Klean Limestone Restorer, following the instructions on the product label.
   2. Afterwash:
      a. Immediately after rinsing the prewash from masonry surface, apply the diluted Afterwash to the wet surface.
      b. Let the Afterwash stay on the surface for three to five minutes.
      c. Pressure rinse from the bottom of the treated area to the top. Make sure to cover each portion of the masonry surface with a concentrated stream of water. To avoid streaking, keep wall surfaces immediately below area...
being cleaned running wet and free of cleaner rundown and residues. The best combination of rinsing pressure and water volume is provided by masonry washing equipment generating 400-1000 psi with a water flow rate of 6-8 gallons per minute delivered through a 15-45 degree fan spray tip. Equipment should be adjustable to reduce water flow rate and rinsing pressure as required for controlled cleaning of more sensitive surfaces.

3. Restoration Cleaner:
   a. After protecting all non-masonry surfaces thoroughly pre-wet the area to be cleaned with fresh water.
   b. Apply cleaning solution liberally using low-pressure spray (50 psi), roller or densely filled (tampico) masonry washing brush.
   c. Leave the cleaning solution on the surface for 3-5 minutes. Reapply.
   d. Light scrubbing improves cleaning results especially if high-pressure rinsing equipment isn’t available. Keep people away from treated surfaces.
   e. Water rinse with low-pressure flood rinse to remove initial acidic residue with minimum risk of wind drift. Then rinse the treated area thoroughly with high-pressure spray. Rinse from the bottom to the top. Flush each section of the surface with a concentrated stream of water. Keep the wall below wet and rinsed free of cleaner and residues to avoid streaks. The best combination of rinsing pressure and water volume is provided by masonry washing equipment generating 400-1000 psi with a water flow rate of 6-8 gallons per minute delivered through a 15-45 degree fan spray tip. Equipment should be adjustable to reduce water flow rate and rinsing pressure as required for controlled cleaning of more sensitive surfaces.

3.11 ADJUSTING AND CLEANING

A. Repair of deficiencies:
   1. Installations of details noted as deficient during final inspection must be repaired and corrected by applicator, and made ready for re-inspection, within five (5) working days.

B. Clean-up:
   1. Section 01 70 00 – Contract Closeout: Final cleaning.
   2. As work proceeds and on completion, remove excess mortar, smears, droppings.
   3. Immediately upon job completion, roof membrane, flashing surfaces, ground and surrounding areas shall be cleaned of debris.

C. Clean surrounding surfaces.

END OF SECTION
DIVISION 5

METALS
PART 1 GENERAL

1.01 SECTION INCLUDES

A. Shop fabricated ferrous metal items, galvanized and prime painted.

B. This section includes the materials and application procedures for the installation the following:
   1. Metal ladders.
   2. Ladder safety cages.
   3. Roof Hatch replacement (N/A)

1.02 RELATED SECTIONS

A. Section 02 22 50 – Demolition.

B. Section 06 11 40 – Wood Blocking and Curbing.

C. Section 07 54 10 – Thermoplastic Membrane Roofing.

D. Section 07 52 20 – Hybrid Composite Built-Up Asphalt Roofing.

E. Section 07 62 00 – Sheet Metal Flashing And Trim.

F. Section 07 90 00 – Sealants

G. Section 09 90 00 – Paints and Coatings.

1.03 REFERENCES

A. ASTM A36 - Structural Steel.

B. ASTM A53 - Hot-Dipped, Zinc-coated Welded and Seamless Steel Pipe.

C. ASTM A123 - Zinc (Hot-Galvanized) Coatings on Products Fabricated From Rolled, Pressed and Forged Steel Shapes, Plates, Bars, and Strip.

D. ASTM A153 - Zinc Coating (Hot-Dip) on Iron and Steel Hardware.

E. ASTM A283 - Carbon Steel Plates, Shapes, and Bars.


G. ASTM A325 - High Strength Bolts for Structural Steel Joints.

H. ASTM A386 - Zinc-Coating (Hot-Dip) on Assembled Steel Products.

I. ASTM A500 - Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Round and Shapes.

J. ASTM A501 - Hot-Formed Welded and Seamless Carbon Steel Structural Tubing.

K. ASTM B177 - Chromium Electroplating on Steel for Engineering Use.

L. AWS A2.0 - Standard Welding Symbols.
M. AWS D1.1 - Structural Welding Code.
N. SSPC - Steel Structures Painting Council.

1.04 SUBMITTALS
A. Submit under provisions of Section 01 30 00.
B. Shop Drawings: Indicate profiles, sizes, connection attachments, reinforcing, anchorage, size and type of fasteners, and accessories. Include erection drawings, elevations, and details where applicable.
C. Indicate welded connections using standard AWS A2.0 welding symbols. Indicate net weld lengths.

1.05 QUALITY ASSURANCE
A. Fabricate structural steel members in accordance with AISC "Steel Construction Manual."
B. Comply with Section 10 of AISC "Code of Standard Practice for Steel Buildings and Bridges" for architecturally exposed structural steel.
C. Fabricator: Engage a firm experienced in fabricating structural steel similar to that indicated for this Project and within 15 percent this project size, with a record of successful in-service performance, as well as sufficient production capacity to fabricate structural steel without delaying the Work.
   1. Fabricator must be designated as an AISC-certified plant, Category SBR/BU.
   2. Contractor Option: Comply with the following procedures instead of engaging an AISC-Certified Plant:
      a. Demonstrate that the fabricator has in place a quality control program for meeting IBC requirements and compliance with AISC recommendations and standards.
      b. At no additional cost to the Owner, provide for an independent field inspection of fabrications and welding to comply with IBC, AISC and AWS recommendations and standards.
      c. Provide certified shop inspection reports signed by the fabricator and an independent inspection agency indicating that the steel, as fabricated, complies with requirements of Contract Documents.
      d. Provide shop drawings signed and sealed by a qualified licensed Structural Engineer, within the project jurisdiction, responsible for design of connections.
      e. The steel fabricator shall provide signed and sealed field modification details with backup computations for all field revisions.
      f. Field modifications details and computations must be prepared by same licensed Structural Engineer preparing shop drawings.
   3. Provide documentation that fabricator has provided material for and erected at least 3 projects within 15 percent of project size and complexity, in the last 6 years.
D. Erector: Company specializing in performing the work of this section with minimum 5 years of documented experience.
E. Design connections not detailed on the drawings under direct supervision of a Professional Structural Engineer experienced in design of this work and licensed in the State of Maryland.

1.06 COORDINATION
A. Coordinate installation of anchorages for metal fabrications. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.

1.07 QUALIFICATIONS
A. Welders' Certificates: Submit under provisions of Section 01 30 00, certifying welders employed on the Work, verifying AWS qualification within the previous 12 months.

1.08 FIELD MEASUREMENTS
A. Verify that field measurements are as indicated on Drawings and shop drawings.

PART 2 PRODUCTS

2.01 MANUFACTURERS
A. Available Products: Subject to compliance with requirements, products that may be incorporated into the Work include, but are not limited to, products specified.
B. Products: Subject to compliance with requirements, provide one of the products specified.
C. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, manufacturers specified.
D. Manufacturers: Subject to compliance with requirements, provide products by one of the manufacturers specified.

2.02 MATERIALS
A. Steel Sections: ASTM A36.
B. Steel Tubing: ASTM A500, Grade B.
C. Plates: ASTM A283.
E. Fasteners: As detailed.
F. Bolts, Nuts, and Washers: ASTM A325 galvanized to ASTM A153 for galvanized components.
G. Welding Materials: AWS D1.1; type required for materials being welded.
H. Shop and Touch-Up Primer: SSPC 6 - SP6 Commercial Blast Cleaning and Prime.
I. Touch-Up Primer for Galvanized Surfaces: PPG Zinc rich type 6-209 galvanized steel primer.

2.03 METALS - GENERAL

A. Metal Surfaces, General: Provide materials with smooth, flat surfaces, unless otherwise indicated. For metal fabrications exposed to view in the completed Work, provide materials without seam marks, roller marks, rolled trade names, or blemishes.

2.04 FASTENERS

A. General: Unless otherwise indicated, provide Type 304 or 316 stainless-steel fasteners for exterior use and zinc-plated fasteners with coating complying with ASTM B 633, Class Fe/Zn 5, at exterior walls. Provide stainless-steel fasteners for fastening aluminum. Select fasteners for type, grade, and class required.

B. Steel Bolts and Nuts: Regular hexagon-head bolts, ASTM A 307, Grade A; with hex nuts, ASTM A 563; and, where indicated, flat washers.

C. Stainless-Steel Bolts and Nuts: Regular hexagon-head annealed stainless-steel bolts, nuts and, where indicated, flat washers; ASTM F 593 for bolts and ASTM F 594 for nuts.

D. Anchor Bolts: ASTM F 1554, Grade 36.

E. Cast-in-Place Anchors in Concrete: Anchors capable of sustaining, without failure, a load equal to four times the load imposed, as determined by testing according to ASTM E 488, conducted by a qualified independent testing agency.

F. Expansion Anchors: Anchor bolt and sleeve assembly with capability to sustain, without failure, a load equal to six times the load imposed when installed in unit masonry and four times the load imposed when installed in concrete, as determined by testing according to ASTM E 488, conducted by a qualified independent testing agency.

2.05 MISCELLANEOUS MATERIALS

A. Welding Rods and Bare Electrodes: Select according to AWS specifications for metal alloy welded.

B. Universal Shop Primer: Fast-curing, lead- and chromate-free, universal modified-alkyd primer complying with MPI#79.

C. Zinc-Rich Primer: Complying with SSPC-Paint 20 or SSPC-Paint 29 and compatible with topcoat.
   1. Products:
      b. Carboline Company; Carbozinc 621.
      c. ICI Devoe Coatings; Catha-Coat 313.
      f. Sherwin-Williams Company (The); Corothane I GalvaPac Zinc Primer.
      g. Approved equal by Owner.

E. Bituminous Paint: Cold-applied asphalt emulsion complying with ASTM D 1187.

F. Non-shrink, Metallic Grout: Factory-packaged, ferrous-aggregate grout complying with ASTM C 1107, specifically recommended by manufacturer for heavy-duty loading applications.

G. Non-shrink, Nonmetallic Grout: Factory-packaged, non-staining, non-corrosive, nongaseous grout complying with ASTM C 1107. Provide grout specifically recommended by manufacturer for interior and exterior applications.

2.06 ROOF HATCH (if noted to be provided per drawings) (Not Applicable)

A. Equal to Bilco type S with Ladder-Up Safety Post (LU-2) 3’-0” x 2’-6”; insulated curb, fully welded corners, EPDM rubber gasketing, cap flashing, compression spring of anticorrosive material, all other hardware zinc plated and chromate sealed. Ladder-Up post-steel, hot dipped galvanized.

B. Existing Roof hatch by Boiler Room: Existing hatch remains. Replace gasket seal around perimeter. Scrape, clean and repaint unit.

2.07 MISCELLANEOUS FRAMING AND SUPPORTS

A. General: Provide steel framing and supports not specified in other Sections as needed to complete the Work.

B. Fabricate units from steel shapes, plates, and bars of welded construction, unless otherwise indicated. Fabricate to sizes, shapes, and profiles indicated and as necessary to receive adjacent construction retained by framing and supports. Cut, drill, and tap units to receive hardware, hangers, and similar items.

2.08 METAL LADDERS

A. General: Comply with ANSI A14.3, unless otherwise indicated.

B. Steel Ladders:
   1. Side-rails: As noted on drawings.
   2. Rungs:
      a. Steel Bar Dimensions;
         1) 3/4-inch to 1-inch diameter
         2) 3/4-inch to 1-inch square
      b. Fit rungs in centerline of side rails; plug-weld and grind smooth on outer rail faces.
      c. Provide non-slip surfaces on top of each rung by coating with abrasive material metallically bonded to rung by a proprietary process.
   3. Brackets: 3 x 3/8 inch steel bent plate; minimum 2 per rail at 48 inch on center spacings vertically, welded to rails and bolted to wall surface with ½ inch diameter bolts for existing wall condition.
   4. Products:
      a. IKG Industries, a Harsco company; Mebac.
      b. W. S. Molnar Company; SlipNOT.
      c. Approved equal by Owner.
   5. Prime exterior ladders, including brackets and fasteners, with zinc-rich primer.

C. Metal Steps: (If shown to be provided per the drawings.)
1. Equal to McNichols safety tread, 36” wide, min 9” tread depth with galvanized channel stringers with galvanized angle support and bracing. Min 1 ¼” Ø galvanized steel handrails (min one side); max tread height is 7”. Heights vary, confirm in field.

D. Interior Ladder at Hatch (if noted to be provided per the drawings):
1. Replace if indicated. Provide a minimum of 7” clearance from wall to rung. Provide new brackets as required.
2. Tighten or re-attach existing ladder at top of wall near hatch.
3. Extend rails to match existing and add rung as required due to new insulation/curb height.
4. Provide ladder up post.

2.09 LADDER SAFETY CAGES (As needed)

A. General:
1. Fabricate ladder safety cages to comply with ANSI A14.3. Assemble by welding or with stainless-steel fasteners.
2. Provide primary hoops at tops and bottoms of cages and spaced not more than 20 feet o.c. Provide secondary intermediate hoops spaced not more than 48 inches o.c. between primary hoops.
3. Fasten assembled safety cage to ladder rails and adjacent construction by welding or with stainless-steel fasteners, unless otherwise indicated.

B. Steel Ladder Safety Cages:
1. Primary Hoops: 1/4-by-4-inch flat bar hoops.
3. Vertical Bars: 3/16-by-1-1/2-inch flat bars secured to each hoop.
4. Prime exterior ladder cages, including fasteners, with zinc-rich primer.

2.10 FABRICATION

A. Fit and shop assemble in largest practical sections, for delivery to site.
B. Fabricate items with joints tightly fitted and secured.
C. Continuously seal joined members by continuous welds.
D. Grind exposed joints flush and smooth with adjacent finish surface. Make exposed joints butt tight, flush, and hairline. Ease exposed edges to small uniform radius.
E. Exposed Mechanical Fastenings: Flush countersunk screws or bolts; unobtrusively located; consistent with design of component, except where specifically noted otherwise.
F. Supply components required for anchorage of fabrications. Fabricate anchors and related components of same material and finish as fabrication, except where specifically noted otherwise.

2.11 FINISHES

A. Prepare surfaces to be primed in accordance with SSPC SP 6- Commercial Blast Cleaning.
B. Do not prime surfaces in direct contact with concrete or where field welding is required.
C. Prime paint items with PPG Water Base Inhibitive Metal Primer 90-712 at 4.8 mils MWF.

D. Galvanize in accordance with ASTM A123, structural steel members. Provide minimum 1.25 oz/sq ft galvanized coating.

E. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.

F. Finish metal fabrications after assembly.

2.12 STEEL AND IRON FINISHES

A. Preparation for Shop Priming: Prepare uncoated ferrous-metal surfaces to comply with minimum requirements indicated below for SSPC surface preparation specifications and environmental exposure conditions of installed metal fabrications:


B. Shop Priming: Apply shop primer to uncoated surfaces of metal fabrications, except those with galvanized finishes and those to be embedded in concrete, sprayed-on fireproofing, or masonry, unless otherwise indicated. Comply with SSPC-PA 1, "Paint Application Specification No. 1: Shop, Field, and Maintenance Painting of Steel," for shop painting.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that field conditions are acceptable and are ready to receive work.

B. Beginning of installation means erector accepts existing conditions.

3.02 PREPARATION

A. Clean and strip primed steel items to bare metal where site welding is required.

B. Supply items required to be cast into concrete or embedded in masonry with setting templates, to appropriate sections.

3.03 INSTALLATION

A. Install items plumb and level, accurately fitted, free from distortion or defects.

B. Allow for erection loads, and for sufficient temporary bracing to maintain true alignment until completion of erection and installation of permanent attachments.

C. Cutting, Fitting, and Placement: Perform cutting, drilling, and fitting required for installing metal fabrications. Set metal fabrications accurately in location, alignment, and elevation; with edges and surfaces level, plumb, true, and free of rack; and measured from established lines and levels.

D. Fit exposed connections accurately together to form hairline joints. Weld connections that are not to be left as exposed joints but cannot be shop welded because of shipping
size limitations. Do not weld, cut, or abrade surfaces of exterior units that have been hot-dip galvanized after fabrication and are for bolted or screwed field connections.

E. Perform field welding in accordance with AWS D1.1.

F. Field Welding: Field weld components indicated on Drawings and shop drawings. Comply with the following requirements:
   1. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.
   2. Obtain fusion without undercut or overlap.
   3. Remove welding flux immediately.
   4. At exposed connections, finish exposed welds and surfaces smooth and blended so no roughness shows after finishing and contour of welded surface matches that of adjacent surface.

G. Fastening to In-Place Construction: Provide anchorage devices and fasteners where metal fabrications are required to be fastened to in-place construction. Provide threaded fasteners for use with concrete and masonry inserts, toggle bolts, through bolts, lag bolts, wood screws, and other connectors.

H. Provide temporary bracing or anchors in formwork for items that are to be built into concrete, masonry, or similar construction.

I. Obtain Architect/Engineer approval prior to site cutting or making adjustments not scheduled.

J. After erection, clean, brush and prime welds, abrasions, and surfaces not shop primed or galvanized, except surfaces to be in contact with concrete.

3.04 INSTALLING MISCELLANEOUS FRAMING AND SUPPORTS

A. General: Install framing and supports to comply with requirements of items being supported, including manufacturers’ written instructions and requirements indicated on Shop Drawings.

B. Anchor supports for operable partitions securely to and rigidly brace from building structure.

C. Support steel girders on solid grouted masonry, concrete or steel pipe columns. Secure girders with anchor bolts embedded in grouted masonry or concrete or with bolts through top plates of pipe columns.

3.05 ADJUSTING AND CLEANING

A. Touchup Painting: Immediately after erection, clean field welds, bolted connections, and abraded areas. Paint uncoated and abraded areas with the same material as used for shop painting to comply with SSPC-PA 1 for touching up shop-painted surfaces

3.06 ERECTION TOLERANCES

A. Maximum Variation from Plumb: 1/4 inch per story, non-cumulative.

B. Maximum Offset from True Alignment: 1/4 inch.
3.07 SCHEDULE

A. The Schedule is a list of principal items only. Refer to Drawing details for items not specifically scheduled.
   1. Ledge and Shelf Angles, Channels and Plates Not Attached to Structural Framing.
   2. Roof ladders/steps as indicated on the drawings.

END OF SECTION
DIVISION 6

WOOD AND PLASTIC
PART 1 GENERAL

1.01 SECTION INCLUDES
   A. Roof curbs, cants and backnailing.
   B. Blocking in wall and roof openings.
   C. Preservative treatment of wood.
   D. Wood deck repair and replacement as required due to deterioration.
   E. This section includes the materials and installation procedures for assemblies fabricated from wood.
   F. Base Bid includes all blocking needed to increase roof edge heights due to new insulation thicknesses. Unit quantities cost to be used for miscellaneous repairs of existing unforeseen conditions with 800 l.f. included in Base Bid. Unit Prices apply if more or less is used.

1.02 RELATED SECTIONS.
   A. Section 01 01 00 – Summary of Work.
   B. Section 02 22 50 – Demolition.
   C. Section 03 51 10 – Cementitious Wood Fiber Decking.
   D. Section 07 52 20 – Hybrid Composite Build-Up Asphalt Roofing.
   E. Section 07 54 10 – Thermoplastic Membrane Roofing.
   F. Section 07 62 00 – Sheet Metal Flashing and Trim.

1.03 REFERENCES
   A. ALSC (American Lumber Standards Committee) - Softwood Lumber Standards.
   B. APA (American Plywood Association).
   C. AWPA (American Wood Preservers Association) C1 - All Timber Products Preservative Treatment by Pressure Process.
   E. NFPA (National Forest Products Association).
   F. RIS (Redwood Inspection Service).
   G. SPIB (Southern Pine Inspection Bureau).
   H. WCLIB (West Coast Lumber Inspection Bureau).
   I. WWPA (Western Wood Products Association).

1.04 QUALITY ASSURANCE
   A. Perform Work in accordance with the following agencies:
      1. Lumber Grading Agency: Certified by ALSC.
2. Plywood Grading Agency: Certified by APA.

1.05 SUBMITTALS

A. Product Data: In accordance with Section 01 30 00, submit manufacturer’s certification for pressure-treated and fire-treated lumber.

PART 2 PRODUCTS

2.01 MATERIALS

A. Lumber Grading Rules: WCLIB and WWPA.
B. Miscellaneous Framing: Stress Group D, S.P.F. species, 19 percent maximum moisture content, pressure preservative treat when wood is in contact with concrete, masonry or metal.
C. Plywood: APA Grade C-C-X; unsanded.
   1. Fire Retardant Treated: Locations as indicated in Drawings or as listed below.
   2. Tongue and Groove: As indicated in Drawings.
D. Particle board: Will not be acceptable.
E. Wood blocking: minimum 2 by 4 inch nominal.
F. Tapered wood for coping drainage: Western Reds Cedar, rabbeted bevel siding, select knotty, 3/4 inch by 10 inches.
G. Wood cant: 4 by 4 inch cut on bias.
H. Free floating fascia cant: Tapered wood strip.
I. Wood sheathing boards: Match the existing thickness x existing width needing replaced. SPF No. 2, free from warping and visible decay.

2.02 ACCESSORIES

A. Fasteners and Anchors:
   1. Fasteners: Hot dipped galvanized steel for high humidity and treated wood locations, unfinished steel elsewhere.
   2. Anchors: Toggle bolt type for anchorage to hollow masonry. Expansion shield and lag bolt type for anchorage to solid masonry or concrete. Bolt or ballistic fastener for anchorages to steel.
B. Fasteners:
   1. Fasteners and connectors for ACQ or copper azoles pressure treated wood shall be of hot-dipped galvanized steel, stainless steel or fluorocarbon coated (excluding one-half inch diameter or greater steel bolts).
      a. Do not use standard carbon steel, aluminum or electroplated galvanized fasteners.
      b. Fasteners and connectors used together shall be of same of same type.
      c. Hot-dipped galvanized fasteners shall meet or exceed ASTM A153 requirements.
         1) Connectors shall meet or exceed ASTM A653, Class G185 sheet with 1.85 ounces or zinc coating per square foot minimum.
      d. Type 300 Series stainless steel fasteners are required for maximum corrosion resistance, such as below grade and saltwater exposure.
e. Hot dipped galvanized fasteners are acceptable for above grade applications.
f. Tremco/Olympic fasteners are recommended for use with treated wood.
   1) Other proprietary (fluorocarbon) coated fasteners are acceptable, but consult the manufacturer for specific information.

2. Wood to wood:
   a. Acceptable manufacturers:
      1) Type 300 Series stainless steel fastener.
      2) Hot-dip galvanized fastener.
      3) Olympic/Olympic No. 12-11 Standard Roofing Fastener, with CR-10 fluorocarbon coating by Tremco.
      4) Approved equal by Owner.
      5) Length:
         a) Use the shortest fastener that will penetrate the wood blocking 1-1/4 inch.
         b) Use the shortest fastener that will penetrate the top of the wood decking a minimum of 1-inch. Fasteners shall not penetrate the underside of wood plank decking.

3. Wood to concrete:
   a. Acceptable manufacturers:
      1) Deckfast #14 screw, by Construction Fasteners, Inc., Wyomissing, PA.
      2) Insul-Fixx #14, by SFS Stadler, Brunswick, OH.
      3) Insul-Tite #14, by Burlington Mfg. Corp., Archbold, OH.
      4) Olympic Fastener #14-10, by Olympic Manufacturing Group, Agawam, MA.
      5) Tapcon -1/4 inch dia., Phillips flat head anchor, by ITW Buildex, Itasca, IL.
      6) Roofgrip #14-10, by ITW Buildex, Itasca, IL.
      7) Rawl Drive or Rawl Spike, by the Rawlplug Co., Inc., New Rochelle, NY.
      9) Approved equal by Owner.
   b. Length: Sufficient to provide 1 to 1-1/2 inch embedment.

4. Wood to concrete, pre-cast plank and cementitious wood fiber decks:
   a. Acceptable manufacturers:
      1) Olympic Fasteners NTB-1H with locking wire barbs.
      2) Approved equal by Owner.
      3) Length: Sufficient to provide 2-inch embedment into deck without penetrating underside of decking.

2.03 FACTORY WOOD TREATMENT

A. Wood Preservative (Pressure Treatment) EPA Approved: AWPA Treatment C1 using water borne preservative with 0.060 L.I.S. CF retainage.
   1. Products treated with ACCA® (chromated copper arsenate) will not be permitted.
   2. AACQ® (amine copper qust) or ACBA® (copper baron azole) treated products will be acceptable.

B. Fire Treatment: Shall be equal to Hoover Treated Wood Products, Inc. of Milford, VA (804) 633-5021 Pyro-Guard Complying with AWPA Type A fire retardant treatment and
shall have a flame spread rating of 25 or less when tested in accordance with ASTM E-84.
1. Interior Fire retardant treated lumber and plywood shall have an equilibrium moisture content of not over 28% when tested in accordance with ASTM D-3201 at 92% relative humidity.
2. Each piece of fire retardant treated lumber and plywood shall be manufactured under Underwriters Laboratories and shall bear the UL Qualification label for surface burning characteristics in the 30 minute E-84 flame test and also indicate kiln drying after treatment (KDAT).

PART 3 EXECUTION

3.01 FRAMING
A. Set members level and plumb, in correct position.
B. Place horizontal members, crown side up.
C. Construct curb members of single pieces.
D. Space framing and furring 16 inches oc.
E. Curb roof openings except where prefabricated curbs are provided. Form corners by alternating lapping side members.
F. Coordinate curb installation with installation of decking and support of deck openings, and parapet construction.

3.02 INSTALLATION
A. Wood Blocking:
1. Mechanically attach horizontal blocking to deck. Install fasteners in two (2) rows staggered. Do not exceed 24 inch spacing in any one (1) row. Within 8 feet of outside corners, do not exceed 12 inch spacing in any one (1) row. Offset blocking layers 12 inches, weave corners.
2. Blocking thickness: Equal to final insulation thickness.
3. Blocking width: minimum 4 inches nominal and 1/2 inch wider than metal flanges.
5. Wood blocking fastening pattern:

   X X X X X X X X X
   X X X X X X X X X

B. Metal Roof Edge:
1. Replace existing wood blocking and taper strip when defective.
   a. Blocking thickness: Equal to final insulation thickness including tapered edge strips (if required).
   b. Blocking width: 6 inches nominal.
3. Install tapered wood strip over free floating metal fascia deck brackets. Nail two (2) rows at a spacing not to exceed 12 inches from each side of deck brackets. Miter corners.
C. Walls: Mechanically attach wood blocking to flashing base.
   1. Offset blocking layers 12 inches; weave corners.
   2. Blocking thickness: Equal to final insulation thickness including tapered edge (if required).

D. Wood curbs:
   1. Mechanically attach wood blocking to deck at all wood curb locations.
      Minimum 2 fasteners per section. Offset blocking layers 12 inches, weave corners.
   2. Blocking thickness: Equal to final insulation thickness.

E. Area Divider / Expansion joint:
   1. Install horizontal and vertical blocking.
      a. Vertical blocking:
         1) Thickness: 2 inches, nominal.
         2) Height: 8 inches above final surface of roofing.
      b. Horizontal blocking:
         1) Thickness: Equal to final insulation thickness, including tapered edge.
         2) Width: 6 inches.
      c. Install and secure preformed 45-degree wood cants. Nail two (2) rows staggered to horizontal and vertical blocking. Spacing in any one (1) row shall not exceed 24 inches (610 mm).

F. At metal sleeve and storm collar:
   1. Mechanically attach wood blocking to deck at all storm collar locations.
      Minimum 2 fasteners per section.
   2. Offset blocking layers 12 inches, weave corners.
      a. Blocking Thickness: Equal to final insulation thickness.
      b. Blocking Width: 6 inches, normal

G. Hot stack pipe detail and collar:
   1. Mechanically attach wood blocking to deck at all hot stack locations minimum 2 fasteners per section.
   2. Mechanically attach flange to wood blocking 3 inches o.c. staggered.
   3. Offset blocking layers 12 inches, weave corners.
      a. Blocking thickness: Equal to final insulation thickness including tapered edge (if required).
      b. Blocking width: 6 inches.
   4. Maintain insulating dead air space at blocking.

H. Penetration pocket locations:
   1. Mechanically attach wood blocking to structural deck at all pitch pan locations; minimum 2 fasteners per section.
   2. Offset blocking layers 12 inches; weave corners.
      a. Blocking thickness: Equal to final insulation thickness including tapered edge (if required).
      b. Width: 6 inches.

I. I-beam locations:
   1. Install horizontal and vertical blocking around column.
   2. Vertical blocking at column:
a. Thickness and type: 3/4 inch thick plywood.
b. Height: 8 inches, above final surface of roofing.

3. Horizontal blocking:
a. Thickness: Equal to final insulation thickness including tapered edge.
b. Height: 8 inches above final surface of roofing.

4. Mechanically attach horizontal blocking to deck, 2 fasteners per section.

5. Install wood cants to blocking. Mechanically attach two (2) rows staggered to horizontal and vertical blocking. Do not exceed 24 inch spacing in any one (1) row

END OF SECTION
DIVISION 7

THERMAL AND MOISTURE CONTROL
PART 1 GENERAL

1.01 RELATED DOCUMENTS
   A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.02 SUMMARY
   A. Section Includes:
      1. Roof tear-off.
      2. Preparation for new roofing.
      4. Temporary Roofing
      5. Vapor Barrier
   B. Related Sections:
      1. Section 01 01 00 – Summary of Work: Use of the premises and phasing requirements; Unit prices for repairs discovered during demolition of the existing roofing system.
      2. Section 01 20 00 – Price and Payment Procedures.
      3. Section 01 50 00 – Construction Facilities and Temporary Controls: Temporary construction and environmental-protection measures for re-roofing preparation.
      4. Section 02 22 50 – Demolition.

1.03 MATERIALS OWNERSHIP
   A. Except for items or materials indicated to be reused, reinstalled, or otherwise indicated to remain Owner's property, demolished materials shall become Contractor's property and shall be removed from Project site.

1.04 DEFINITIONS
   A. Roofing Terminology: Refer to ASTM D 1079 and glossary in NRCA's "The NRCA Roofing and Waterproofing Manual" for definition of terms related to roofing work in this Section.
   B. Existing Asphalt Roofing System: Glass and wood fiber insulation and multiple ply and modified bitumen asphalt built-up roof
   C. Roof Re-Cover Preparation: Existing roof deck is to remain and be prepared for reuse.
   D. Roof Tear-Off: Removal of existing membrane roofing systems to the level of the structural roof deck.
   E. Remove: Detach items from existing construction and legally dispose of them off-site unless indicated to be removed and reinstalled.

1.05 SUBMITTALS
   A. Photographs: Show existing conditions of adjoining construction and site improvements, including exterior and interior finish surfaces that might be misconstrued as having been damaged by re-roofing operations. Submit before Work begins.
   B. Landfill Records: Indicate receipt and acceptance of hazardous wastes, such as asbestos-containing material, by a landfill facility licensed to accept hazardous wastes.
1.06 QUALITY ASSURANCE

A. Regulatory Requirements: Comply with governing EPA notification regulations before beginning membrane roofing removal. Comply with hauling and disposal regulations of authorities having jurisdiction.

B. Re-roofing Conference: Conduct conference at Project Site.
   1. Meet with the Owner, Architect, roofing system manufacturer's representative; roofing installer including project manager, superintendent, and foreman; and installers whose work interfaces with or affects re-roofing including installers of roof accessories and roof-mounted equipment.
   2. Review methods and procedures related to roofing system tear-off and replacement including, but not limited to, the following:
      a. Re-roofing preparation, including membrane roofing system manufacturer's written instructions.
      b. Temporary protection requirements for existing roofing system that is to remain during and after installation.
      c. Temporary protection of the area below the work taking place.
      d. Existing roof drains and roof drainage during each stage of re-roofing, and roof drain plugging and plug removal requirements.
      e. Construction schedule and availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
      f. Condition and acceptance of existing roof deck and base flashing substrate for reuse.
      g. Structural loading limitations of deck during re-roofing.
      h. Base flashings, special roofing details, drainage, penetrations, equipment curbs, and condition of other construction that will affect re-roofing.
      i. HVAC shutdown and sealing of air intakes.
      j. Shutdown of fire-suppression, -protection, and -alarm and -detection systems.
      k. Governing regulations and requirements for insurance and certificates if applicable.
      l. Existing conditions that may require notification of Architect before proceeding.

1.07 PROJECT CONDITIONS

A. Owner will occupy portions of building immediately below re-roofing area. Conduct re-roofing so Owner's operations will not be disrupted. Provide Owner with not less than 72 hours' notice of activities that may affect Owner's operations.
   1. Coordinate work activities daily with Owner so Contractor can place protective dust or water leakage covers over sensitive equipment, collections, furnishings, shut down HVAC and fire-alarm or -detection equipment if needed, and evacuate occupants from below the work area.
   2. Before working over mechanical penetrations for fans and ducts, notify Owner to evacuate occupants from below the affected area. Verify that occupants below the work area have been evacuated before proceeding with work over the impaired deck area.

B. Protect building to be re-roofed, adjacent buildings, walkways, site improvements, exterior plantings, and landscaping from damage or soiling from re-roofing operations.

C. Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities.

D. Conditions existing at time of inspection for bidding will be maintained by Owner as far as practical.
1. The results of an analysis of test cores from existing membrane roofing system are available for Contractor's reference.

2. Construction Drawings and Project Manual for existing roofing system are provided for Contractor's reference. Contractor is responsible for conclusions derived from existing documents.

E. Weather Limitations: Proceed with re-roofing preparation only when existing and forecasted weather conditions permit Work to proceed without water entering existing roofing system or building.

F. Hazardous Materials: It is not expected that hazardous materials such as asbestos-containing materials will be encountered in the Work.
   1. Hazardous materials will be removed by Owner before start of the Work. Existing and temporary roofing will be left no less watertight than before removal.
   2. If materials suspected of containing hazardous materials are encountered, do not disturb; immediately notify Architect and Owner. Hazardous materials will be removed by Owner under a separate contract.

PART 2 PRODUCTS

2.01 VAPOR BARRIER AND TEMPORARY ROOFING MATERIALS
   A. Glass-Fiber Ply Sheets: ASTM D 2178, Type VI, asphalt-impregnated, glass-fiber felt.
   B. Asphalt Primer: ASTM D 41.
   C. Roofing Asphalt: ASTM D 312, Type III or IV.
   D. Solvent Free Adhesive: One part, solvent free, asbestos-free, low-odor elastomeric roof mastic specifically formulated for compatibility and use with roofing membrane and flashings.

PART 3 EXECUTION

3.01 PREPARATION
   A. Coordinate with Owner to shut down air-intake equipment in the vicinity of the Work. Cover air-intake louvers before proceeding with re-roofing work that could affect indoor air quality or activate smoke detectors in the ductwork.
   B. During removal operations, have sufficient and suitable materials on-site to facilitate rapid installation of temporary protection in the event of unexpected rain.
   C. Maintain roof drains in functioning condition to ensure roof drainage at end of each workday. Prevent debris from entering or blocking roof drains and conductors. Use roof-drain plugs specifically designed for this purpose. Remove roof-drain plugs at end of each workday, when no work is taking place, or when rain is forecast.
      1. If roof drains are temporarily blocked or unserviceable due to roofing system removal or partial installation of new membrane roofing system, provide alternative drainage method to remove water and eliminate ponding. Do not permit water to enter into or under existing membrane roofing system components that are to remain.
   D. Verify that rooftop utilities and service piping have been shut off before beginning the Work.
3.02 ROOF TEAR-OFF
   A. General: Notify Owner each day of extent of roof tear-off proposed for that day and obtain authorization to proceed.
   B. Roof Tear-Off: Remove existing roofing other roofing system components down to the top level of the structural and roof deck.
      1. Remove all built-up asphalt roofing with gravel, along with all components and accessories including all roof insulation.

3.03 SUBSTRATE PREPARATION AND TEMPORARY ROOF INSTALLATION
   A. Inspect existing roof decks after tear-off of existing roofing system.
   B. Verify that existing roof deck is sound and without deterioration or loss of solid structural consistency.
   C. Replace damaged roof deck with similar material.
   D. Install vapor/barrier/temporary roof by mechanically attaching a base sheet to existing roof deck and mopping one (1) plies of Type IV ply sheet in full mopping of hot asphalt.

3.04 EXISTING BASE FLASHINGS
   A. Remove existing base flashings around parapets, curbs, walls, and penetrations.
      1. Clean substrates of contaminants such as asphalt, sheet materials, dirt, and debris.
   B. Do not damage metal counterflashings that are to remain. Replace metal counterflashings damaged during removal with counterflashings as specified in Section 07620 - Sheet Metal Flashing and Trim.

3.05 DISPOSAL
   A. Collect demolished materials and place in containers. Promptly dispose of demolished materials. Do not allow demolished materials to accumulate on-site.
      1. Storage or sale of demolished items or materials on-site is not permitted.
   B. Transport and legally dispose of demolished materials off Owner's property.

END OF SECTION
PART 1 — GENERAL

1.01 SECTION INCLUDES
A. High density wood fiberboard and polyisocyanurate roof board types and applications. Roof section application and layout requirements.

1.02 RELATED DOCUMENTS
A. Drawings and contract documents, including Section 01 01 00 - Summary of Work, apply to this section.

1.03 RELATED SECTIONS
A. Section 01 01 00 - Summary of Work
B. Section 01 60 00 - Material and Equipment
C. Section 01 70 00 - Contract Closeout
D. Section 02 22 50 - Demolition
E. Section 04 90 00 - Masonry Restoration and Cleaning
F. Section 05 50 00 - Metal Fabrications
G. Section 06 11 40 - Wood Blocking and Curbing
H. Section 07 52 20 - Hybrid Composite Built-up Asphalt Roofing
I. Section 07 54 10 – Thermoplastic Membrane Roofing.
J. Section 07 62 00 - Sheet Metal Flashing And Trim
K. Section 07 90 00 - Joint Sealers

1.04 REFERENCES
A. ASTM C 208 Cellulose Fiber Insulating Board
B. ASTM C 1289 Polyisocyanurate Insulating Board
C. UL Roofing and Materials Directory 2003, Underwriters Laboratories Inc.
D. Factory Mutual Global – Approval Guide

1.05 SUBMITTALS
A. Contractor shall provide at Pre-Construction meeting approved insulation samples. Product data sheets shall accompany samples, MSDS sheets shall match the name on the product data submitted.
   1. Polyisocyanurate insulation board
   2. High Density (H.D.) fiberboard
   3. Manufacturer’s tapered insulation plan per roof section.
4. Cover board as approved by manufacturer.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Delivery of Materials:
1. Deliver materials to job-site in new, dry, unopened and well-marked containers showing product and manufacturers name.
2. Deliver materials in sufficient quantity to allow continuity of work.
3. Coordinate delivery with project superintendent.
4. Do not order project materials or start work before receiving written notice to proceed. No work shall commence without signed contracts.
5. The facilities staff shall not sign any material deliveries.

B. Storage of Materials:
1. Store rolled goods on ends only. Place materials on pallets. Do not stack pallets.
2. Store materials marked “KEEP FROM FREEZING” in areas where temperatures will remain above 40º F.
3. For insulation, remove plastic packaging shrouds. Cover top and sides of all stored materials with tarpaulin (not polyethylene). Secure tarpaulin.
4. Rooftop storage: Disperse material to avoid concentrated loading.
5. Do not store materials in open or in contact with ground or roof surface.
6. Store all materials on a raised platform covered with secured canvas tarpaulin (not polyethylene), top to bottom. Cover all materials when project is not in progress and maintain the ability at all times to cover the materials when required, such as during an unanticipated rain shower.
7. Contractor shall assume full responsibility for the protection and safekeeping of products stored on premises.

C. Material handling:
1. Handle materials to avoid bending, tearing, or other damage during transportation and installation.
2. Material handling equipment shall be selected and operated so as not to damage existing construction or applied roofing. Do not operate or situate material handling equipment in location that will hinder smooth flow of vehicular or pedestrian traffic.

1.07 ENVIRONMENTAL REQUIREMENTS

A. Environmental requirements:
1. Do not work in rain, snow, or in presence of water and high wind conditions.
2. Do not work in temperatures below 40º F.
3. Do not install materials marked “KEEP FROM FREEZING” when daily temperatures are scheduled to fall below 40º F.

B. Remove any work exposed to freezing.
1. Advise Owner when volatile materials are to be used near air ventilation intakes so Owner can use some or all of the following methods to minimize disruptions to building occupants and operations:
   a. Divert air intake from work area by attaching scoops or temporary ductwork.
   b. Temporarily shut down or block air intakes.
PART 2 — PRODUCTS

2.01 GENERAL

A. Comply with quality control, references, specifications, and manufacturer's data. Products containing asbestos are prohibited on this project. Use only asbestos-free products.

B. Use products with personal protection. User must read container label and material safety data sheets prior to use.

2.02 ACCEPTABLE MANUFACTURERS

A. Use only approved Polyisocyanurate board. Acceptable manufacturers include:
   1. Hy-Therm AP by Celotex
   2. ENERGY-2 by Johns Manville
   3. ISO95+GL by Firestone
   4. AC Foam-II by Atlas
   5. Approved equal by Owner.

B. Use only approved High Density Fiberboard. Acceptable manufacturers include:
   1. Temple Inland Fiber Base HD Insulation
   2. Approved equal by Owner.

C. Single ply membrane cover board.
   2. DensDeck/Prime Sheathing.

2.03 MATERIALS

A. Base, Tapered and Flat Polyisocyanurate Board Insulation:
   1. FS HH-I-1972 (1) Class 1, factory-tapered polyisocyanurate.
   2. Black, glass fiber reinforced, non-asphaltic facer
   3. Dimensions: 4 by 4 feet x minimum 1 inch min. thickness. For existing decks start at 2 inch minimum unless noted otherwise.
      a. The insulation thickness shall be adjusted as required to meet or exceed the roof insulation systems specified R-Value requirement (R30 avg).
   4. Tapered polyisocyanurate insulation will be installed as a 4-way tapered layout or as shown on roof drawing.
   5. Provide factory-tapered insulation boards fabricated to the following slopes:
      a. 1/4-inch rise per 12 inch run
      b. At existing deck areas as shown on the plans at 1/8-inch rise per 12 inch run where noted or when existing deck has 1/8-inch slope integral with structure.
   6. Provide flat stock insulation boards for steep slopes in decks of 1/4 inch per foot slope or more.
      a. Provide at minimum 2 layers to achieve R30 R-value. The first layer shall be at least 2 inches thick, mechanically attached; and a second layer of 3 1/2 inches adhered to the first layer.

B. Tapered Polyisocyanurate Saddle and Cricket Insulation:
   1. FS HH-I-1972 (1) Class 1, tapered isocyanurate.
   2. Black, glass fiber reinforced, non-asphaltic facer
   3. Dimensions: 4 by 4 feet.
   4. Provide factory-tapered insulation boards fabricated to slope of twice (2 times) the roof system slope, with a minimum of 1/2 inch per foot.
C. Top Insulation Layer (BUR System):
   1. Six-Sided Asphalt Coated High Density Fiberboard. ASTM C 208, Type II, Grade 2, cellulosic-fiber insulation board.
   2. Dimensions: 4 by 4 feet by 1/2 inch thick.

D. Cover Board (Single Ply Membrane):
   1. Gypsum based cover board, 0.25 inch, R-value – Negligible.
   2. Dimensions: 4 x 4 feet, non-combustible, water resistant gypsum core with embedded glass mat facers complying with ASTM C1177.

E. Tapered Edge Strips: ASTM C 208, asphalt-coated fiberboard, tapered from 1-5/8 inch to 1/8 inch; dimensions: 12" x 48".

F. Fibered Cant Strips:
   1. ASTM C 208-95, asphalt-coated fiberboard, factory fabricated.
   2. Dimensions: 4 by 4 inch cut on bias.

G. Insulation Roof Board Adhesive:
   1. Base Insulation layer mechanically fastened per Section 07 52 20.
   2. Adhesive: Subsequent Layers set in hot asphalt per Section 07 52 20.

H. Insulation Adhesive Primer: Low-VOC, water-based, polymer modified asphalt primer.

I. Roof insulation accessories: As recommended by insulation manufacturer for intended use and compatible with membrane roofing.

PART 3 — EXECUTION

3.01 EXAMINATION

A. Verify conditions as satisfactory to receive work.

B. Do not begin roofing until all unsatisfactory conditions are corrected. Beginning work constitutes acceptance of conditions.

C. Verify that work of other trades penetrating existing roof deck or requiring men and equipment to traverse existing roof deck has been approved by Owner, manufacturer, and roofing contractor.

D. Check existing projections, curbs, and deck for inadequate anchorage, foreign material, moisture, or unevenness that would prevent quality and execution of new roofing system.

3.02 GENERAL WORKMANSHIP

A. All work performed by contractor shall conform to this specification.

B. The presence and activity of the manufacturer's representative, architect's representative, and/or Owner's representative shall in no way relieve contractor of contract responsibilities or duties.

C. Substrate: Free of foreign particles prior to laying roof insulation.

D. Wrapper and packaging materials: Not to be included in roofing system.

E. Insulation: Form continuous insulation joints over existing decking.

F. Install insulation boards in courses parallel to roof edges.

G. Firmly butt each insulation board to surrounding boards. Do not jam or deform boards.

H. Eliminate open joints and uneven surfaces.
2. Fill insulation board joint gaps larger than 1/4 inch with roof insulation.

I. Cut and fit insulation boards where roof deck intersects vertical surfaces. Cut board 1/4 inch from vertical surface.

J. Stagger joints at least 6 inches.

K. Filler size: 18 inches in length or width, minimum.

3.03 PREPARATION

A. Protection:
1. Contractor shall be responsible for protection of property during course of work. Lawns, shrubbery, paved areas, and building shall be protected from damage. Repair damage and/or clean marred areas at no extra cost to owner.
2. Provide at site prior to commencing removal of debris, a dumpster or dump truck to be located adjacent to building where directed by owner.
3. Roofing, flashings, membrane repairs, and insulation shall be installed and sealed in a watertight manner on same day of installation or before arrival of inclement weather.
4. At start of each work day drains within daily work area shall be plugged. Plugs to be removed at end of each workday or before arrival of inclement weather. Preparation work shall be limited to those areas that can be covered with installed roofing material on same day and before arrival of inclement weather.
5. Arrange work sequence to avoid use of newly constructed roofing for storage, walking surface, and equipment movement. Move equipment and ground storage areas as work progresses.
6. Protect building surfaces at set-up areas with tarpaulin. Secure tarpaulin. Remove dumpster from premises when full and empty at approved dumping or refuse area. Deliver empty dumpster to site for further use. Upon job completion, dumpster shall be removed from premises. Spilled or scattered debris shall be cleaned-up immediately. Removed material to be disposed from roof as it accumulates.
7. At end of each working day, seal removal areas with water stops along edges to prevent water entry.
8. Provide clean plywood walkways and take other precautions required to prevent tracking of aggregate/debris from existing membrane into new work area where aggregate/debris pieces can be trapped within new roofing membrane. Contractor shall instruct and police workmen to ensure that aggregate/debris is not tracked into new work areas on workmen's shoes or equipment wheels. Discovery of entrapped aggregate/debris within new membrane is sufficient cause for its rejection.

B. Asphalt heating:
1. Use low burner flames during initial meltdowns. Circulate asphalt after initial meltdown.
2. Maximum asphalt temperature: 25 degrees F below the flash point.
3. Avoid prolonged heating of asphalt at high temperatures. Reduce the asphalt temperature to below 500 degrees F if asphalt is not being used for periods of 4 hours or more.
5. Application rates: Bitumen quantities for water stop/tie-offs, flashings, miscellaneous detail applications, and minimum kettle capacity are not included in application rates. Mopping rate - 25 pounds per 100 square feet plus or minus 20 percent.
6. Heat and apply asphalt in accordance with equiviscous temperature (EVT) melted as recommended by NRCA. Temperature shall be EVT plus or minus 25 degrees at point of application. Discard bitumen that does not fall within this standard.

C. Surface preparation:
1. Remove existing roofing and insulation to existing roof deck.
2. Sweep clean existing roof deck.
3. Install pressure treated wood nailers as required to match new insulation height.
4. Install base sheet if required prior to insulation application.
5. Install backnailing 2x at 10'-0" o.c. on steep sloped deck areas. Per manufacturer’s NRCA acceptable roofing standards.

3.04 INSTALLATION
A. Install new tapered roof insulation system. Comply with built-up roofing manufacturer’s written instructions for installing roof insulation.
   1. General Requirements:
      a. The minimum insulation average R-Value requirement for the project is R-30. The installed insulation thickness shall be adjusted as required to meet or exceed the roof insulation systems specified R-Value requirement min. thickness.
      b. Install insulation with long joints of insulation in a continuous straight line with end joints staggered between rows, abutting edges and ends between boards.
      c. Fill gaps exceeding 1/4 inch with insulation.
      d. Cut and fit insulation within 1/4 inch of nailers, projections, and penetrations.
      e. Install insulation system in application of solvent free insulation adhesive with beads at 12” o.c per manufacturer’s recommendations. Let adhesive rise. Walk insulation boards into adhesive immediately after placement to achieve solid contact
      f. Immediately after placement, walk insulation boards into adhesive to achieve solid contact.
      g. Install insulation under area of roofing to achieve required thickness. Where overall insulation thickness is 2.7 inches or greater, install two or more layers with joints of each succeeding layer staggered from joints of previous layer a minimum of 6 inches in each direction.
      h. Trim surface of insulation where necessary at roof drains so completed surface is flush and does not restrict flow of water.
      i. At steep slope conditions, provide 2x wood blocking at 10 foot spacings on center for backnailing. Total height to match insulation thickness. Note blocking shall run horizontally across slope with cap sheets running perpendicular to slope.

B. Install base and tapered polyisocyanurate insulation system.
   1. Install tapered polyisocyanurate insulation with 1/4 inch per foot slope except where 1/8 inch per foot slope is shown.
   2. Minimum insulation thickness as required to meet the specified insulation system R-Value requirement.
   3. Install 4 by 4 ft. tapered insulation sumps at roof drain locations and 2 by 2 ft tapered insulation sumps at scupper locations (excluding overflow roof drains and scuppers).
   4. Adhere tapered insulation layers, tapered edge and cant strips in full application of solvent free insulation adhesive for single ply membrane systems or hot asphalt at 25 lbs per 100 sq. ft. per BUR systems. Walk boards into adhesive immediately after installation to achieve solid contact.
C. Install base flat/tapered insulation layer.
   1. At existing Cementitious Wood Fiber Deck (if applicable):
      a. Adhere insulation to base sheet surface with a uniform and continuous application of Solvent Free Insulation Adhesive or type III hot asphalt per system being installed.

   2. (Not Applicable) At Existing Metal Deck Areas: mechanically fasten and adhere insulation: Install first layer of insulation to deck using mechanical fasteners specifically designed and sized for fastening specified board-type roof insulation to deck type.
      a. Remove existing insulation by backing out each metal fastener and removing the insulation.
      b. Clean roof deck and wall surfaces of dust, debris and other substances detrimental to roofing installation according to roof system manufacturer’s written instruction. Remove sharp protections. Sweep deck clean prior to installing new roof system. Duct tape all the holes.
      c. Mechanically attach new insulation with one (1) fastener per 2 sq. ft.
         1) Fasten first layer of insulation according to requirements in FM Approvals' "RoofNav" for specified Windstorm Resistance Classification.
         2) Fasten first layer of insulation to resist uplift pressure at corners, perimeter, and field of roof.
      d. Install all subsequent layers with a uniform and continuous application of hot asphalt or insulation adhesive.
         1) Set each subsequent layer of insulation in a solid mopping of hot roofing asphalt, applied within plus or minus 25 deg F of equiviscous temperature.

D. Install tapered insulation saddles and install tapered insulation saddles or crickets to promote positive drainage along valley lines between roof drains and scuppers, along walls, at high side of roof curbs and as instructed at Pre-Construction Meeting.
   1. Install tapered polyisocyanurate insulation with minimum 1/2-inch per foot slope.
   2. Tapered insulation saddle and cricket slope shall equal a minimum of twice the roof slope.
   3. Saddle widest width shall equal or exceed 1/3 of the distance between the roof drains or scuppers.
   4. Contractor is responsible for the elimination of ponding water along valley lines.
   5. Adhere tapered insulation to base tapered insulation layer with a uniform and continuous application of insulation adhesive or hot asphalt applied within plus or minus 25 deg F of equiviscous temperature.

E. Install insulation on steep slopes similar with the use of 2 layers of insulation to meet the min R-value with Type IV asphalt.

F. Install appropriate cover boards for system to be installed over insulation with long joints in continuous straight lines with end joints staggered between rows. Offset joints of insulation below a minimum of 6 inches in each direction. Loosely butt cover boards together and fasten to roof deck. Tape joints if required by roofing manufacturer.
   1. Fasten cover boards according to requirements in FM Approvals' "RoofNav" for specified Windstorm Resistance Classification.
   2. Fasten cover boards to resist uplift pressure at corners, perimeter, and field of roof.
   3. Apply hot roofing asphalt to underside and immediately bond cover board to substrate.
a. Adhere insulation over bottom layer insulation with a uniform and continuous application of insulation adhesive or hot asphalt applied within plus or minus 25 deg F of equiviscous temperature.

G. Install tapered edge strips.
   1. Install tapered edge strips where blocking height exceeds insulation height.
   2. Adhere tapered edge strips over top layer insulation with a uniform and continuous application of insulation adhesive or hot asphalt applied within plus or minus 25 deg F of equiviscous temperature.

H. Install fibered cant strips.
   1. Adhere 45 degrees and continuous cants (4 by 4's) at intersections of horizontal and vertical flashing surfaces with a uniform and continuous application of hot asphalt applied within plus or minus 25 deg F of equiviscous temperature.

END OF SECTION
PART 1 - GENERAL

1.1 SUMMARY
A. This section includes the materials and application procedures for metal wall panels above existing perimeter window around building per Alternate No. 2.

1.2 RELATED SECTIONS INCLUDE THE FOLLOWING:
A. Section 01 01 00 Summary of Work
B. Section 06 06 00 Rough Carpentry
C. Section 07 52 00 Hot-Applied Built-Up Roofing
D. Section 07 54 10 Thermoplastic Membrane Roofing
E. Section 07 62 00 Sheet Metal Flashing and Trim
F. Section 07 90 00 Joint Sealant
G. Section 09 90 00 Paints and Coatings

1.3 PERFORMANCE REQUIREMENTS
A. General: Install a watertight, metal wall panel systems with compatible components that will not permit the passage of liquid water and will withstand wind loads, thermally induced movement, and exposure to weather.

1.4 REFERENCES
A. ASTM - American Society for Testing and Materials, West Conshohocken, PA.
B. AISI Specifications for the “Design of Light- Gage, Cold- Formed Steel Structural Steel Members”.
C. CAN/CSA-S136 “Cold- Formed Steel Structural Steel Members”.
D. ASTM A653/A653M - Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated by the Hot-Dip Process (formerly ASTM A526 and A446).
E. ASTM A924/A924M - Steel Sheet, Aluminum-Zinc Alloy Coated by the Hot-Dip Process, Structural (Physical) Quality.
F. ASTM B32 - Specification for Solder Metal.
G. ASTM E283: Static Air Infiltration.
H. ASTM E331: Static Water Infiltration.
I. HERR VOSS: Tension Leveling.
J. UL 90 Rating: Wind uplift approval conforming to U.L. Section 580 specifications. Underwriter’s Laboratory, Northbrook, IL.
1.5 PROJECT CONDITIONS
A. Weather Limitations: Proceed with work only when existing and forecasted weather conditions permit roofing to be installed.

1.6 QUALITY ASSURANCE
A. Perform Work in accordance with SMACNA Architectural Sheet Metal Manual requirements and standard details, except as otherwise noted.

1.7 QUALIFICATIONS
A. Fabricator and Installer: Company specializing in sheet metal installations with minimum three years documented experience and approved by manufacturer.

1.8 DELIVERY, STORAGE, AND HANDLING
A. Section 01 60 00 - Product Requirements: Product storage and handling requirements.
B. Stack material to prevent twisting, bending, and abrasion, and to provide ventilation. Slope metal sheets to ensure drainage.
C. Prevent contact with materials which may cause discoloration or staining.
D. Trim with strippable film shall not be exposed to direct sunlight or extreme heat.

1.9 WARRANTY
A. Section 01 70 00 - Execution Requirements: Product warranties and product bonds.
B. Provide manufacturer’s written watertightness warranty (min. 25 years) against leaks in the wall system, including all trims, flashings and penetrations arising from or caused for ordinary wear and tear under normal weather and atmospheric conditions. Coverage shall be for the full contract amount of manufacturer’s installed wall system. Panels shall be inspected by trained third party inspectors at the start, during installation and completion of work of this section.
C. Provide twenty five (25) year manufacturer non-prorated finish warranty for custom sheet metal panels including cracking, checking, blistering, peeling, flaking, chipping, chalking and resistance to color fade. Labor to be included.
D. Warranty of this section shall be part of overall roof warranty for Sections 07 52 20 or 07 54 10 for single source warranty of roofing systems.

PART 2 - PRODUCTS

2.1 WALL MANUFACTURERS
A. Manufacturers: Subject to compliance with requirements, provide products by the following:
1. TremLock CP II Metal Wall Panel System. (Flush panel system) hidden fasteners.
2. Firestone/UnaClad UC-6.
3. Approved equal by Owner.

2.2 SYSTEM COMPONENTS
A. Wall Panels:
1. Factory rolled 24 gage galvanized metal, per ASTM A653 requirements and factory painted with 70% Kynar 500 & Hylar 5000 fluoropolymer coating.
a. Panel dimensions: 3’ wide by total height of wall structure.
b. Corrugation profile: Four per panel, each 1-1/2 inches high and 12 inches apart.
c. Color: As selected by Owner from manufacturer’s standard colors.

B. Framing: (If existing is not adequate)
1. Subgirts and metal closures shall be a minimum 22 gage, rolled-formed steel sections. All framing members shall be factory pre-punched or field-drilled for fastener placement.

C. Fasteners:
1. Wall panel to structural framing:
   a. Torx head fasteners
   b. Torx head self-drilling screw
   c. Lock Rivet fastener
2. Panel to panel:
   a. Torx head self-drilling screw
   b. Lock Rivet fastener
3. All exposed fasteners shall be prepainted.
4. Provide metal-backed EPDM washers under heads of fasteners bearing on weather side of panels.
5. Locate and space fasteners for true vertical and horizontal alignment. Use proper type fastening tools to obtain controlled, uniform compression for positive seal without rupture of EPDM washer.

D. Fabrication:
1. Shop-fabricate to the size and section, as required, for erection. All required holes for fastening or connecting shall be pre-drilled or pre-punched to the template dimensions.
   a. Shop connections welded.
   b. Field connections bolted.

E. Flexible Closure Strips: Rubber, self-extinguishing, cut or premolded to match corrugation configuration of roofing sheets. Provide where indicated and necessary to ensure weathertight construction.

F. Sealing Tape: 99 percent solids, pressure-sensitive, polyisobutylene compound tape with release paper backing. Not less than 1 inch wide and 1/8 inch thick, non-sag, nontoxic, nonstaining and permanently elastic.

G. Joint Sealant: One-part elastomeric; polyurethane or polysulfide as recommended by panel manufacturer.

H. Metal Primer: Water Based Metal Primer.

2.3 SHEET METAL ACCESSORIES
A. General: Unless otherwise indicated, provide coated steel accessories with coated steel roofing (same material). Provide painted steel accessories with painted wall panels.
PART 3 - EXECUTION

3.1 EXAMINATION
   A. Examine substrates, areas, and conditions under which roofing will be applied, with installer present, for compliance with requirements.

3.2 PREPARATION
   A. Clean substrate of dust, debris, and other substances detrimental to new wall panel installation according to system manufacturer’s written instructions. Inspect wall substrate for deterioration and damage, describing its nature and extent in a written report, with copies to project superintendent. Repair or replace defective wall substrate as required.
   B. Remove, modify existing panels that will be re-installed. Clean and touch up paint as required due to this work.

3.3 GENERAL INSTALLATION REQUIREMENTS
   A. Metal wall panel system shall be installed in strict conformance with manufacturer’s instructions.

3.4 WALL PANEL INSTALLATION
   A. Remove existing panels and prep for new metal panels for installation.
   B. Structural system shall be plumb before wall panels are attached.
   C. Framed Openings:
      1. Provide frames of proper design and size to reinforce the opening. Securely attach to building structural framing.
      2. Field fabricate and install metal flashing at metal wall panel and door jam transitions. Install metal flashing behind door jam.
      3. Provide weatherseal between wall panels door framing and metal edge or gutter.
   D. Panel Sheets:
      1. Align and secure wall panels to structural members in accordance with erection drawing.
      2. Side laps shall be at least one full corrugation.
      3. Side lap seams shall be tight and flat. Fishmouthing of panels between fasteners is not acceptable.
      4. Install exterior trim.
   E. Sheet Metal Accessory:
      1. Install sheet metal accessories in accordance with manufacturer’s recommendations for positive anchorage to building and weathertight mounting.
   F. New panels shall cover existing fascia material, however no attachment can be made into this fascia material.

3.5 FIELD QUALITY CONTROL
   A. Final Panel Inspection:
      1. Arrange for system manufacturer’s technical personnel to inspect installation on completion.
3.6 PROTECTING AND CLEANING

A. Protect metal wall panels from damage and wear during construction.

B. Correct deficiencies in or remove wall panels that do not comply with requirements, to a condition free of damage and deterioration at the time of Substantial Completion and according to warranty requirements.

C. Clean over spray and spillage from adjacent construction using cleaning agents and procedures recommended by manufacturer of affected construction.

END OF SECTION
PART 1 – GENERAL

1.01 SUMMARY

A. This section includes the materials and application procedures for the installation of 3+1 SBS Modified BUR roofing system set in hot asphalt; cap sheet to have white granular reflective coating per Alternate No. 1.

1.02 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

B. Related Sections include the following:
   1. Section 02 22 50 – Demolition
   2. Section 03 51 10 – Cementitious Wood Fiber Decking
   3. Section 05 50 00 – Metal Fabrication
   4. Section 06 11 40 – Wood Blocking and Curbing for wood blocking, curbs, cants, and nailers.
   5. Section 07 09 10 – Preparation for Reroofing – Roof removal
   6. Section 07 22 20 - Roof and Deck Insulation – Roof Insulation
   7. Section 07 54 10 – Thermoplastic Membrane Roofing
   8. Section 07 62 00 – Sheet Metal Flashing and Trim for roof curbs, equipment supports, roof hatches, roof walkways, heat and smoke vents.
   9. Section 07 90 00 – Joint Sealers.

1.03 REFERENCES

A. ASTM - American Society for Testing and Materials, West Conshohocken, PA.

B. NRCA - National Roofing Contractors Association, Chicago, IL

C. UL - Underwriter’s Laboratory, Northbrook, IL.

1.04 DEFINITIONS

A. Roofing Terminology: Refer to ASTM D 1079 and glossary of NRCA's "The NRCA Roofing and Waterproofing Manual" for definition of terms related to roofing work in this Section.

B. Hot Roofing Asphalt: Roofing asphalt heated to its equiviscous temperature, the temperature at which its viscosity is 125 centipoise for mopping application and 75 centipoise for mechanical application, within a range of plus or minus 25 deg F (14 deg C), measured at the mop cart or mechanical spreader immediately before application.
1.05 PERFORMANCE REQUIREMENTS

A. General: Provide installed roofing membrane and base flashings that remain watertight; do not permit the passage of water; and resist specified uplift pressures, thermally induced movement, and exposure to weather without failure.

B. Material Compatibility: Provide roofing materials that are compatible with one another under conditions of service and application required, as demonstrated by roofing manufacturer based on testing and field experience.

C. Roofing System Design: Provide a roofing system that is identical to systems that have been successfully tested by a qualified testing and inspecting agency to resist uplift pressure calculated according to FMG 1-A-90

1.06 SUBMITTALS

A. Product Data: For each type of product indicated.

B. Installer Certificates: Signed by roofing system manufacturer certifying that Installer is approved, authorized, or licensed by manufacturer to install roofing system.

C. Warranties: Special warranties specified in this Section.

1.07 QUALITY ASSURANCE

A. Installer Qualifications: A qualified firm that is approved, authorized, or licensed by roofing system manufacturer to install manufacturer's product and that is eligible to receive manufacturer's warranty.

B. Manufacturer Qualifications: A qualified manufacturer that has UL listing for roofing system identical to that used for this Project.

C. Roofing system manufacturer shall provide onsite inspector for the duration of the roof installation.

D. Source Limitations: Obtain components for roofing system from roofing system manufacturer.

E. Fire-Test-Response Characteristics: Provide roofing materials with the fire-test-response characteristics indicated as determined by testing identical products per test method below by UL, FMG, or another testing and inspecting agency acceptable to authorities having jurisdiction. Materials shall be identified with appropriate markings of applicable testing and inspecting agency.
1. Exterior Fire-Test Exposure: Class A; ASTM E 108, for application and roof slopes indicated.
2. Fire-Resistance Ratings: ASTM E 119, for fire-resistance-rated roof assemblies of which roofing system is a part.

F. Pre-installation Conference: Conduct conference at Project site. Comply with requirements in Section 01 03 90 – Coordination and Meetings. Review methods and procedures related to roofing system including, but not limited to, the following:
1. Meet with Owner, Architect, Owner's insurer if applicable, testing and inspecting agency representative, roofing installer, roofing system manufacturer's
representative, deck installer, and installers whose work interfaces with or affects roofing including installers of roof accessories and roof-mounted equipment.

2. Review methods and procedures related to roofing installation, including manufacturer's written instructions.

3. Review and finalize construction schedule and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.

4. Examine deck substrate conditions and finishes for compliance with requirements, including flatness and fastening.

5. Review structural loading limitations of roof deck during and after roofing.

6. Review base flashings, special roofing details, roof drainage, roof penetrations, equipment curbs, and condition of other construction that will affect roofing system.

7. Review governing regulations and requirements for insurance and certificates if applicable.

8. Review temporary protection requirements for roofing system during and after installation.

9. Review roof observation and repair procedures after roofing installation.

1.08 DELIVERY, STORAGE, AND HANDLING

A. Deliver roofing materials to Project site in original containers with seals unbroken and labeled with manufacturer's name, product brand name and type, date of manufacture, and directions for storage.

B. Store liquid materials in their original undamaged containers in a clean, dry, protected location and within the temperature range required by roofing system manufacturer. Protect stored liquid material from direct sunlight.
   1. Discard and legally dispose of liquid material that cannot be applied within its stated shelf life.

C. Protect roof insulation materials from physical damage and from deterioration by sunlight, moisture, soiling, and other sources. Store in a dry location. Comply with insulation manufacturer's written instructions for handling, storing, and protecting during installation.

D. Handle and store roofing materials and place equipment in a manner to avoid permanent deflection of deck.

1.09 PROJECT CONDITIONS

A. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit roofing system to be installed according to manufacturer's written instructions and warranty requirements.

1.10 WARRANTY

A. Special Warranty: Manufacturer's standard form, without monetary limitation, in which manufacturer agrees to repair or replace components of roofing system that fail in materials or workmanship within specified warranty period. Failure includes roof leaks.
   1. Special warranty includes roofing membrane, base flashings, roofing membrane accessories, roof insulation, fasteners, cover boards, and other components of roofing system.
   2. Warranty Period: 25 years from date of Substantial Completion.
3. Upon project completion and Owner acceptance, effective upon complete payment the Roofing Contractor shall issue a guarantee against defective workmanship and materials for a period of two (2) years.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
   1. Built-up Hybrid Asphalt Roofing:
      a. Firestone Building Products I-(3)FP-31-G
      b. Johns Manville Corp.
      c. Tremco. (Basis of Design)
      d. Approved equal by Owner.

2.02 ROOFING MEMBRANE PLIES

A. Base Ply Sheet: Non-perforated, waterproof asphalt-coated, polyester/glass scrim/glass mat trilaminate reinforcement coated sheet, dusted with fine mineral surfacing on both sides and meets the requirements of ASTM D 4601, Type II Trilaminate ply of polyester/fiberglass/polyester. Sheet must be a waterproof sheet, equal to MB Base Sheet at minimum. Asbestos Free, One (1) ply as recommended by the roofing manufacturer per their membrane system.

B. Ply Sheets: ASTM D 2178, Type VI, asphalt-impregnated, glass-fiber felt.

   1. Thickness minimum: .120 inches
   2. Tensile strength @ 77 ºF – ASTM D5147-95 81 lbf/in MD / 76 lbf/in XMD
   3. Elongation @ 77 ºF – ASTM D5147-95 7.7 % MD / 7.9 % XMD
   4. Tear strength @ 77 ºF – ASTM D5147-95 104 lbf/in MD / 108 lbf/in XMD
   5. Low temperature flexibility - ASTM D5147-95 -15 ºF

2.03 FLASHING MATERIALS

A. Flashing Base Sheet: ASTM D 6163, Type I, glass fiber reinforced SBS-modified asphalt-impregnated sheet, dusted with fine mineral surfacing on both sides. Set in hot asphalt.

B. Elastomeric Sheeting and Flashing.
   1. Elastomeric sheething compounded from elastomeric laminated to high strength polyester reinforcing scrim and meets the requirements of ASTM D 5019, Type I, Grade II, CSPE sheet. Thickness: .045-inch
   2. Elastomeric Flashing Adhesive: Solvent-Free Elastomeric Roofing Mastic: One-part, solvent-free, asbestos-free, low-odor elastomeric roof mastic specially formulated for compatibility and use with specified roofing membranes and flashings.

C. Stripping ply for flashings ply laps:
   1. Glass-Fiber Fabric: Woven glass reinforcement treated with organic resin and complying with ASTM D 1668, Type III.
   2. Size: 6 inches minimum.

D. Stripping ply for 2-ply stripping of metal flange flashings:
   1. Base layer of 2-ply stripping ply:
      b. 6 inches minimum.
   2. Top layer of 2 ply stripping ply:
      b. 3 inches beyond base layer (9 inches minimum).
   3. Stripping ply adhesive: Type III Hot Asphalt.
   4. Primer for metal flanges:
      a. Water-based Primer.
      b. Low volatile (VOC) primer.

E. Flashing Sealant Tape:
   1. Teflon Tape - Flexible butyl based sealant tape.
   2. Dimensions: 1/8 inch by 1 inch.

2.04 ASPHALT MATERIALS

A. Asphalt Primer: ASTM D 41.

B. Roofing Asphalt: ASTM D 312-95a performance requirements, Type III or IV as recommended by built-up roofing system manufacturer for application.
   1. Asphalt must have the “no smell” additive.

2.05 ASPHALT PRIMER

A. Water based Primer.

B. Water-Based Asphalt Primer: Water-based, polymer modified, asphalt primer

C. Low volatile (VOC) primer - VOC Compliant Asphalt Primer: Solvent-based asphalt primer.

2.06 SOLVENT-FREE ELASTOMERIC ROOFING MASTIC

A. One-part, solvent-free, asbestos-free, low-odor elastomeric roof mastic specially formulated for compatibility and use with specified roofing membranes and flashings.

2.07 ASPHALT ROOFING MASTIC

A. One-part, asbestos-free, cold-applied mastic specially formulated for compatibility and use with specified roofing membranes and flashings and meets the requirements of ASTM D 4586, Type II, Class 1.

2.08 TEMPORARY TIE-IN MATERIALS

A. G-2 base sheet - Non-perforated, asphalt-impregnated and coated glass-fiber sheet dusted with fine mineral surfacing on both sides and meets the requirements of ASTM D 4601, Type II.
2.09 AUXILIARY ROOFING MEMBRANE MATERIALS

A. General: Auxiliary materials recommended by roofing system manufacturer for intended use and compatible with built-up roofing.

B. Provide miscellaneous accessories recommended by roofing system manufacturer.

C. Loose Granules: Same type as applied to cap sheet. To be placed in the over bleed of the cap sheet during application.

D. Asphalt Roofing Cement: ASTM D 4586, asbestos free, of consistency required by roofing system manufacturer for application.

E. Mastic Sealant: Polyisobutylene, plain or modified bitumen, non-hardening, non-migrating, non-skinning, and nondrying.

F. Fasteners: Factory-coated steel fasteners and metal or plastic plates meeting corrosion-resistance provisions in FM 4470; designed for fastening roofing membrane components to substrate; tested by manufacturer for required pullout strength; and acceptable to roofing system manufacturer.
   1. Roof membrane to wood nailers:
      a. Simplex Cap Nails for attachment into wood; Length: 1-1/4 inch
      b. Approved equal by Owner.

G. Metal Flashing Sheet: Metal flashing sheet is specified in Section 07 62 00 - Sheet Metal Flashing and Trim.

H. Miscellaneous Accessories: Provide miscellaneous accessories recommended by roofing system manufacturer.

I. Walk Pads: Walkway Pads: Mineral-surfaced asphaltic composition panels, factory formed, non-porous, with a slip-resisting surface texture, manufactured specifically for adhering to built-up roofing as a protection course for foot traffic.

J. Flashing Coating: Type I, heat-reflective, non-fibered, aluminum pigmented roof coating that meets the requirements of ASTM D 2824; Two (2) coats

2.10 ROOF INSULATION

A. General: Refer to Section 07 22 20 - Roof and Deck Insulation. Provide preformed roof insulation boards that comply with requirements and referenced standards, selected from manufacturer's standard sizes and of thicknesses indicated.

PART 3 EXECUTION

3.01 EXAMINATION

A. Examine substrates, areas, and conditions, with Installer present, for compliance with the following requirements and other conditions affecting performance of roofing system:
   1. Verify that roof openings and penetrations are in place and set and braced and that roof drains are securely clamped in place.
   2. Verify that wood cants, blocking, curbs, and nailers are securely anchored to roof deck at penetrations and terminations and that nailers match thicknesses of
3. Verify backnailing members are installed at proper spacings on steep slopes.

3. Verify that surface plane flatness and fastening of steel roof deck comply with requirements in Section 05 31 20 - Steel Roof Deck.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.02 PREPARATION

A. Clean substrate of dust, debris, moisture, and other substances detrimental to roofing installation according to roofing system manufacturer's written instructions. Remove sharp projections.

B. Prevent materials from entering and clogging roof drains and conductors and from spilling or migrating onto surfaces of other construction. Remove roof-drain plugs when no work is taking place or when rain is forecast.

3.03 INSULATION INSTALLATION

A. Coordinate installing roofing system components so insulation is not exposed to precipitation or left exposed at the end of the workday.

B. Comply with roofing system manufacturer's written instructions for installing roof insulation.

C. Install one lapped course of base sheet, mechanically fasten to deck, set one ply sheet in solvent free cold adhesive or hot asphalt according to roofing system manufacturer's written instructions.

D. Refer to Section 07 22 20 - Roof and Deck Insulation for detailed requirements.

3.04 ROOFING MEMBRANE INSTALLATION, GENERAL

A. Install built-up roofing membrane system according to roofing system manufacturer's written instructions and applicable recommendations of ARMA/NRCA's "Quality Control Guidelines for the Application of Built-up Roofing."

1. Install roofing system I-3G-31-M, according to roofing system manufacturer’s specifications and "The NRCA Roofing and Waterproofing Manual" requirements for designed system.

B. Start installation of built-up roofing membrane in presence of roofing system manufacturer's technical personnel.

C. Cooperate with testing and inspecting agencies engaged or required to perform services for installing built-up roofing system.

D. Coordinate installing roofing system components so insulation and roofing membrane sheets are not exposed to precipitation or left exposed at the end of the workday or when rain is forecast.

1. Provide tie-offs at end of each day's work to cover exposed roofing membrane sheets and insulation with a course of coated felt set in roofing cement or hot roofing asphalt with joints and edges sealed.

2. Complete terminations and base flashings and provide temporary seals to prevent water from entering completed sections of roofing system.
3. Remove and discard temporary seals before beginning work on adjoining roofing.

E. Asphalt Heating:
1. Maximum asphalt temperature: 25° F below the flash point.
2. Avoid prolonged heating of asphalt at high temperatures. Reduce the asphalt temperature to below 500° F if asphalt is not being used for periods of 4 hours or more.
3. Tanker: Free of contaminants.
4. Application rates: Bitumen quantities for water stop/tie-offs, flashings, miscellaneous detail applications, and minimum kettle capacity are not included in application rates. Mopping rate - 25 pounds per 100 square feet plus or minus 20 percent.
5. Heat and apply asphalt in accordance with equiviscous temperature (EVT) melted as recommended by NRCA. Temperature shall be EVT plus or minus 25° F at point of application. Discard bitumen that does not fall within this standard.

F. Substrate-Joint Penetrations: Prevent roofing asphalt from penetrating substrate joints, entering building, or damaging roofing system components or adjacent building construction.

3.05 ROOFING MEMBRANE INSTALLATION

A. Install one lapped course of base sheet, extending sheet over and terminating beyond cants. Attach base sheet as follows:
1. Adhere to substrate in a solid mopping of hot roofing asphalt.

B. Install three ply sheets starting at low point of roofing system. Align ply sheets without stretching. Shingle side laps of ply sheets uniformly to achieve required number of plies throughout thickness of roofing membrane. Place ply sheets to ensure water will flow over or parallel to, but never against exposed edges. Shingle in direction to shed water. Extend ply sheets over and terminate beyond cants.
1. Embed each ply sheet in a solid mopping of hot roofing asphalt applied at rate required by roofing system manufacturer, to form a uniform membrane without ply sheets touching.
2. Immediately after installation, broom and/or roll ply sheet. Ensure complete and continuous seal and contact between adhesive and felts, including ends, edges and laps without wrinkles, fish mouths, or blisters. Broom/roller width: 34 inches minimum.
3. Apply uniform and continuous pressure to exposed edge and end laps to ensure complete adhesion.
4. Avoid walking on plies until adhesive has set.
5. Overlap previous day’s work 24 inches.
7. Embed each ply in a uniform and continuous application of ply adhesive at a rate of 25 lbs. per 100 square feet at EVT.
8. At steep slopes run each ply perpendicular to slope of roof, backnailed @ 20'-0” o.c.

C. Cap Sheet: Install lapped granulated cap sheet starting at low point of roofing system. Offset laps from laps of preceding ply sheets and align cap sheet without stretching. Lap in direction to shed water. Extend cap sheet over and terminate beyond cants.
1. Embed cap sheet in a solid mopping of hot roofing asphalt applied at rate of 25 lbs. per 100 square feet at EVT or as required by roofing system manufacturer.
3.06  FLASHING AND STRIPPING INSTALLATION

A.  Install Elastomeric Flashing in Adhesive:
   1.  Adhere elastomeric sheeting completely to flashing surface, cant, and roofing with a 1/4inch notched trowel at 1 gallon per 12 sq. ft. of Solvent Free flashing adhesive, immediately embed elastomeric sheeting into the flashing adhesive.
Apply consistent pressure to entire surface of elastomeric sheeting using a steel hand roller to achieve full adhesion of the sheeting to the flashing substrate. Ensure complete bond and continuity without wrinkles or voids. Lap sheeting ends 6 inches. Adhere laps with Solvent Free Adhesive.

Seal horizontal edges of sheeting to roof surface and vertical edges of sheeting with reinforcing mesh embedded in a base course of Solvent Free mastic and a top course of solvent free elastomeric flashing adhesive.

Elastomeric sheeting width: sufficient to extend at least 6 inches beyond toe of cant onto new roof.

Secure top edge of flashing membrane with metal termination bar and Teflon Tape. Fasten bar 6 to 8 inches o.c. Seal termination bar with three-course reinforcing mesh and asphaltic mastic as required.

B. Install base flashing over cant strips and other sloping and vertical surfaces, at roof edges, and at penetrations through roof, and secure to substrates according to roofing system manufacturer's written instructions and as follows:

1. Prime substrates with asphalt primer if required by roofing system manufacturer.
2. Flashing Base Sheet Application: Mechanically fasten backer sheet to walls or parapets. Adhere base sheet over roofing membrane at cants in a solid mopping of hot roofing asphalt.
3. Flashing Cap Sheet Application: Adhere flashing sheet to substrate in a solid mopping of hot roofing asphalt applied at not less than 425 deg F (218 deg C). Apply hot roofing asphalt to back of flashing sheet if recommended by roofing system manufacturer.

C. Extend base flashing up walls or parapets a minimum of 8 inches above roofing membrane and 4 inches onto field of roofing membrane.

D. Mechanically fasten top of base flashing securely at terminations and perimeter of roofing.

1. Seal top termination of base flashing.

E. Install stripping, according to roofing system manufacturer's written instructions, where metal flanges and edgings are set on built-up roofing.

1. Flashing-Sheet Stripping: Install flashing-sheet stripping in a continuous coating of asphalt roofing cement or in a solid mopping of hot roofing asphalt applied at not less than 425 deg F, and extend onto roofing membrane.
3. Built-up Stripping: Install stripping of not less than 2 roofing membrane ply sheets, setting each ply in a continuous coating of asphalt roofing cement or in a solid mopping of hot roofing asphalt, and extend onto roofing membrane 4 inches and 6 inches, respectively.

F. Roof Drains: Set 30-by-30-inch metal flashing in bed of asphalt roofing cement on completed roofing membrane. Cover metal flashing with stripping and extend a minimum of 4 inches (100 mm) beyond edge of metal flashing onto field of roofing membrane. Clamp roofing membrane, metal flashing, and stripping into roof-drain clamping ring.

1. Install flashing-sheet stripping by same method as installing base flashing.
2. Install stripping of not less than two roofing membrane ply sheets, each set in a continuous coating of asphalt roofing cement or in a solid mopping of hot roofing asphalt.
3.07 WALKWAY PAD APPLICATION

A. Install walkway pads at roof access points, under wood sleepers, satellite dish, and to match existing walkway plan.
   1. Prime clean, smooth membrane ply surface with Low volatile (VOC) primer.
   2. Install walkway pads in spot adhesion using asphaltic mastic to ply surface.

3.08 DAILY WATERSTOP/TIE-INS

A. Remove embedded gravel/debris from top ply of felt along termination; Width: 18 inches
B. Adhere 12 and 18 inch wide ply sheets from exposed deck to existing roofing with a continuous 1/16 thick application of tie-off mastic. Glaze cut-off with surfacing mastic.
   Extend 18 inch wide felt 3 inches either side of 12-inch felt.
C. Install ‘deadman’ insulation filler at insulation staggers.
D. Extend roofing system at least 12 inches onto prepared area of adjacent roofing. Seal edge with 6 inches wide reinforcing membrane embedded between alternate courses of tie-off mastic.
E. Remove temporary connection at beginning of next workday by cutting felts evenly along edge of existing roof system. Remove ‘deadman’ insulation fillers.

3.09 COATING INSTALLATION

A. Apply coatings to base flashings according to manufacturer's written instructions, by spray, roller, or other suitable application method.

3.10 FIELD QUALITY CONTROL

A. Testing Agency: the Contractor shall engage a qualified independent testing and inspecting agency to perform roof tests and inspections and to prepare test reports.
B. Test Cuts: Before flood coating and surfacing built-up roofing membrane, test specimens will be removed to evaluate problems observed during quality-assurance inspections of roofing membrane as follows:
   1. Approximate quantities of components within roofing membrane will be determined according to ASTM D 3617.
   2. Test specimens will be examined for interply voids according to ASTM D 3617 and to comply with criteria established in Appendix 3 of ARMA/NRCA's "Quality Control Guidelines for the Application of Built-up Roofing."
C. Roof Inspection: Arrange for roofing system manufacturer's technical personnel to inspect roofing installation and submit report to Architect.
   1. Notify Architect or Owner 48 hours in advance of date and time of inspection.
D. Repair or remove and replace components of roofing system where test results or inspections indicate that they do not comply with specified requirements.
E. Additional testing and inspecting, at Contractor's expense, will be performed to determine compliance of replaced or additional work with specified requirements.
3.11 PROTECTING AND CLEANING

A. Protect roofing system from damage and wear during remainder of construction period. When remaining construction will not affect or endanger roofing, inspect roofing for deterioration and damage, describing its nature and extent in a written report, with copies to Architect and Owner.

B. Correct deficiencies in or remove roofing system that does not comply with requirements, repair substrates, and repair or reinstall roofing system to a condition free of damage and deterioration at time of Substantial Completion and according to warranty requirements.

C. Clean overspray and spillage from adjacent construction using cleaning agents and procedures recommended by manufacturer of affected construction.

D. Contractor shall be responsible for vehicles and other property found to be contaminated by adhesive.

END OF SECTION
PART 1 GENERAL

1.01 SUMMARY

A. This section includes the materials and application procedures for a Thermoplastic Polyolefin (TPO) Single Ply Roofing System as Base Bid with hot applied vapor barrier.

B. Other Manufacturers’ System may be considered as a substitution as noted if such substitution meets or exceeds performance standards as specified per this section and as approved by Owner.

1.02 RELATED DOCUMENTS

A. Drawings and contract documents, including Section 01 01 00 Summary of Work, apply to this section.

1.03 RELATED SECTIONS INCLUDE THE FOLLOWING:

A. Section 03 51 10 – Cementitious Wood fiber Decking

B. Section 06 11 40 - Wood Blocking and Curbing

C. Section 07 22 20 - Roof and Deck Insulation

D. Section 07 52 20 - Hybrid Composite Built-up Asphalt Roofing

E. Section 07 62 00 - Sheet Metal Flashing and Trim

1.04 DEFINITIONS

A. Roofing Terminology: Refer to ASTM D 6878 and glossary of NRCA's "The NRCA Roofing and Waterproofing Manual" for definition of terms related to roofing work in this Section.

1.05 PERFORMANCE REQUIREMENTS

A. General: Install a watertight, fully adhered single ply thermoplastic roofing system with compatible components that will not permit the passage of liquid water and will withstand wind loads, thermally induced movement, and exposure to weather.

1.06 REFERENCES

A. ASTM - American Society for Testing and Materials, West Conshohocken, PA.

B. NRCA - National Roofing Contractors Association, Chicago, IL

C. UL - Underwriter’s Laboratory, Northbrook, IL.

D. TRC - Tremco Inc. Research Center - Beachwood, OH

1.07 PROJECT CONDITIONS

A. Weather Limitations: Proceed with roofing work only when existing and forecasted weather conditions permit roofing to be installed. Single Ply Systems shall not be installed during periods of precipitation.

B. Applications that involve known, severe exposures require a complete review by the manufacturer before their acceptance. This includes, but is not limited to, unusual building exposure to wind, unusual roof slope, unusual roof use, unusual exposure to

WCPS – Funkstown Elem. School	 THERMOPLASTIC MEMBRANE
Roof Replacement		 07 54 10-1
ROOFING
contaminants, openings in the structure (greater than 10% of the wall surface), which could be left open in a storm, roofs subject to positive pressure conditions and roofs greater than 45 feet in height. For roofs subject to special job conditions, contact an authorized manufacturer’s agent.

1.08 WARRANTY

A. Section 01 74 00 – Contract Closeout: Requirements for warranties.

B. Special Warranty: Written warranty in which Manufacturer agrees to repair roof installations that fail in materials or workmanship within specified warranty period.
   1. Failures include, but are not limited to, the following:
      a. Membrane failures including rupturing, cracking, or puncturing.
      b. Deterioration of membranes, coatings, metals, metal finishes, and other associated materials beyond normal weathering.
      c. Limit of Warranty Coverage: Not to exceed original purchase price of manufacturer's materials, except that manufacturer may elect to apply the limit amount toward the following:
         d. Purchase of replacement application within the first 5 years following completion of roofing work.

2. Qualified Installer Requirement: Installer must meet requirements of Quality Assurance Article.

3. Installation Inspection Requirement: By Roofing Inspector in accordance with requirements of Article 3.12 below.

4. Annual Manufacturer Inspection and Preventive Maintenance Requirement: By manufacturer's technical representative, to report maintenance responsibilities to Owner necessary for preservation of Owner's warranty rights. The cost of manufacturer's annual inspections and preventive maintenance is included in the Contract Sum. Inspections to occur in Years 2, 5, 10, 15, and 20 following completion.

5. Warranty Period: 25 years from date of completion of roofing work.

C. Installer's Warranty: Submit roofing Installer's warranty signed by Installer, covering the Work of this Section and related Sections indicated above, including all components of built-up roofing such as built-up roofing membrane, base flashing, roof insulation, fasteners, cover boards, substrate boards, vapor retarders, roof pavers, and walkway products, for the following warranty period: 2 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

A. Manufacturers: Subject to compliance with requirements, provide products by the following:
   1. Tremco Incorporated
   2. Firestone
   3. Verisco
   4. Other manufacturers systems that may be considered if the system meeting or exceeds the specified requirements as approved by Owner.

2.02 THERMOPLASTIC ROOF MEMBRANE MATERIALS

A. TPO Field Membrane Sheets:
   1. TPO Elastomeric Sheeting
a. Flexible thermoplastic polyolefin roofing membrane with polyester weft-inserted reinforcement.
b. Exceeds the performance requirement of ASTM D 6878.
c. Surface Color: White (gray underside).
d. Thickness: 60 mil

2. Approved equal by Owner.

B. TPO Field Membrane Adhesive:

C. Vapor Barrier: Mechanically fastened base sheet per Section 07 52 20 with 1 ply base sheet set in hot asphalt.

2.03 BASE FLASHING MATERIALS

A. Base Flashing Sheets:
1. TPO Perimeter Sheet.
   a. Flexible thermoplastic polyolefin roofing membrane with polyester weft-inserted reinforcement.
   b. Exceeds the performance requirement of ASTM D 6878.
   c. Surface Color: White (gray underside).
   d. Thickness: 60 mil

2. Approved equal per Owner.

B. Base Flashing Adhesive:

C. Membrane Coated Metal Flashing:
1. TPO Coated Metal:
   a. .060 mil thick membrane laminated to 0.023” (minimum) G90, 24gauge, hot dipped galvanized steel with back wash coat of .0001” clear acrylic.
   b. White Sheet Metal Stock
      1) Size: 4’ by 10’ per sheet

2. Approved equal by Owner.

D. Flashing Accessories:
   1. Cover Strip:
      a. TPO Cover Strip
         1) Reinforced TPO Flashing Membrane
         2) Roll Size: 6’ by 108’ by 40 mil thick.

   2. 2-Piece Drain Flashing Membrane:
      a. TPO Flashing Membrane
         1) Unreinforced TPO membrane
         2) Roll Size: 24” by 30” by 55 mil thick.

   3. Vent Pipe Boots:
      a. TPO Prefabricated Flashing Boots
         1) Unreinforced TPO membrane
         2) Pipe Size as required:
            a) Small 1 inch to 4 inches
            b) Large 4 inches to 8 inches

      b. TPO Field Fabricated Boots
         1) TPO Flashing Membrane
         2) Unreinforced TPO membrane
         3) Roll Size: 24” by 30” by 55 mil thick.

   4. Corners:
      a. TPO Prefabricated Universal Corners
         1) Unreinforced TPO membrane
2) Size: 3-1/2 inches (nominal) to all edges

5. Drain Sealant:
   a. GeoFlex Drain Sealant
      1) Waterblock sealant.
   b. TremSEAL D by Tremco Incorporated.
      1) Urethane sealant.
   c. Or approved equal by Owner.

2.04 MEMBRANE FASTENERS AND PLATES

A. All screw type fasteners shall be a minimum #15 shank diameter for membrane securement. Hex head fasteners are not permitted for insulation or membrane securement.

2.05 ACCESSORY MATERIALS

A. Metal cleaner: Mineral spirits
B. TPO Membrane cleaner: Acetone by others.
C. Termination bar:
   1. Aluminum, with caulk receiver: 1/4 by 1 inch
   2. Primer: TremPrime Non-Porous Primer or equal.
   3. Caulking: TremSEAL D or equal.
   4. Compressible tape: TremFlash (TF) Tape or equal.
D. Temporary Tie-in Materials.
   1. Three ply application of sheeting bond and BURmesh
   2. Foam Pack by others.
E. Pitch Pan Fill:
   2. Top fill: Two-part polyurethane, two compartment (1:1 ratios), solvent free, low odor urethane sealant, two-color for reliable mixing.
F. Air Seal:
   1. Backer Rod by others: Joint backing rod, closed cell polyethylene, non-bleeding neoprene, or butyl.
   2. Foam Pack by others.

2.06 WALK PADS

A. TPO Walkway Roll:
   1. A gray thermoplastic membrane which is comprised of a thermoplastic olefin. TPO Walkway Roll is reinforced with a high strength, wick resistant polyester fabric and has a serrated, slip resistant surface. TPO Walkway Roll is asbestos free and exceeds the performance requirements of ASTM D 6878.
   2. Roll Size: 3’ by 60’ by 80 mil thick.
   3. Color: Gray

PART 3 - EXECUTION

3.01 EXAMINATION

A. Examine substrates, areas, and conditions under which roofing will be applied, with installer present, for compliance with requirements.
B. Verify that roof openings and penetrations are set in place and braced.
C. Verify that roof drains are properly clamped into position.
D. Verify that wood blocking, curbs, and nailers are securely anchored to roof deck at roof penetrations and terminations and match the thickness of insulation required.

3.02 PREPARATION
A. Clean substrate of dust, debris, and other substances detrimental to roofing installation according to roofing system manufacturer’s written instructions. Remove sharp projections.
B. Prevent materials from entering and clogging roof drains and conductors and from spilling or migrating onto surfaces of other construction. Remove roof-drain plugs when no work is taking place or when rain is forecast.

3.03 JOB CONDITIONS
A. Prior to the use of any TPO roofing material, consult Material Safety Data Sheets for applicable cautions and warnings.
   1. Do not use oil or bituminous base roof cement with TPO materials.
   2. Do not install TPO membrane directly in contact with new or resaturated asphalt.
   3. Do not expose membrane or accessories to temperatures of 180°F or above.
   4. Do not allow waste products (petroleum grease, oil or solvents, etc.) or direct steam venting to come in contact with the TPO roofing system. Any exposures not typical for normal roofing installation must be presented to the Roof Manufacturer for assessment of any impact on the performance of the roofing system.
   5. Do not install TPO membrane directly in contact with coal tar roof surfaces.
   6. Install polyethylene vapor barrier ply under new insulation layer when mechanically attached TPO membrane system is installed over existing coal tar roofs.
   7. Ponding conditions will adversely affect performance of the roofing system. Where positive drainage does not exist, water removal from roof surface should be facilitated by lowering drains, and/or installing additional drains, tapered insulation, or an approved lightweight insulating concrete slope system.

3.04 GENERAL INSTALLATION REQUIREMENTS
A. Install thermoplastic roofing membrane system according to roofing system manufacturer’s written instructions and applicable recommendations of ARMA/NRCA’s “Quality Control Guidelines for the Application of Thermoplastic Roofing”.
B. Install roofing system per manufacturer’s published specifications manual.
C. Coordinate installation of roofing system components so insulation and roofing plies are not exposed to precipitation or remain exposed at the end of the workday or when rain is forecast.
D. Provide water cutoffs at end of each day’s work to cover exposed ply sheets and insulation. Water tightness of the water cutoffs is the Contractor’s responsibility.
E. Complete terminations and base flashings and provide temporary seals to prevent water from entering completed sections of roofing system.
F. Remove and discard temporary seals before beginning work on adjoining roofing.
G. Substrate-Joint Penetrations: Prevent adhesive from penetrating substrate joints, entering building, or damaging roofing system components or adjacent building construction.
3.05 INSULATION INSTALLATION
A. Coordinate installing roofing system components so insulation is not exposed to precipitation or left exposed at the end of the workday.
B. Comply with roofing system manufacturer’s written instructions for installing roofing insulation.
C. Refer to Section 07 22 00 Roof and Deck Insulation for detailed requirements.

3.06 HOT AIR WELDING EQUIPMENT
A. Manufacturer’s TPO seams can only be made by the hot-air welding process. When the membrane is properly fused, the hot-air heat welding process produces seams that are as strong as the TPO membrane itself. The following information is presented as a guide to assist Contractors in utilizing hot-air heat welding equipment. Prior to actual selection and operation of the hot-air heat welding equipment, refer to the manufacturer’s operating instructions. The operation of hot-air heat welding equipment, and the results obtained utilizing this equipment, are the responsibility of the roofing Contractor.

1. Leister Variant Automatic Welder
   b. Power cord and plugs: #10 wire with 3-prong twist plug. #10 wire may be used up to 150’ in length. For longer lengths, consult an electrician for line voltage drop.
   c. Element: 4500 Watts
   d. Adjustment Tools: Adjustable wrench, various metric box wrenched, various metric allen wrenches, screwdrivers, 40mm nozzle only.
   e. Additional Weight: A 45lb. Supplemental weight is required for the automatic welder. It shall rest on the aluminum housing over the rear wheels when the welder is being used.

2. Leister “Triac” Hand Welder
   a. Power requirements: 115 volts, 15 amps, and 1800 watts single phase.
   b. Power cord #12. Check with electrician for line voltage drop for length over 200’.
   c. Element: 1600 Watt
   d. Accessories: 40mm nozzle, various silicone and metal rollers.

3. Power Generators
   a. If a power generator is used only for the automatic welder, a minimum of 220 volts, 30 amps and 7500-watts unit is required. If additional items are used such as hand welder, screw guns or other equipment, increased generator capacity is required. A minimum 220 volt, 30 amp and 1000 watts generator is recommended.

3.07 ADHERED TPO ROOF MEMBRANE INSTALLATION
A. Install membrane according to roofing system manufacturer’s written instructions, starting at low point of roofing system. Place ply sheets to ensure water will flow over or parallel to, but never against exposed edges. Shingle in direction to shed water.
   1. Install sheet according to ASTM D 5036.
   2. Install air seal where required at perimeter, curbs and penetration flashings.
   3. Manufacturer’s TPO membrane shall be fully adhered to properly installed and prepared substrate surface. The surface shall be clean, dry, smooth, and free from contamination.
   4. The roof perimeters and corners may require additional design to develop the necessary resistance for wind conditions in excess of gale force winds. Contact manufacturer for additional information if the building is located where winds...
may exceed standard warranty conditions or special code provisions are required.

5. The membrane shall be cut to fit neatly around all penetrations and roof projections.

6. The roofing membrane shall be unrolled and positioned with a minimum 3-inch overlap. Laps shall be shingled with, or run parallel to, the slope of the roof.

B. TPO Field Membrane Application using TPO Single Ply Bonding Adhesive:

1. Install (60 mil) Reinforced TPO field membrane sheets.

2. Install TPO field sheets using TPO Single Ply Bonding Adhesive. Stir the TPO Single Ply Bonding Adhesive thoroughly. Do not thin adhesive with solvents. Apply bonding adhesive to both substrate and membrane surfaces at a rate of 50 to 60 square feet per gallon per side.

3. Begin field membrane installation at low point of deck. Allow sheet to overhang roof edge a minimum of 1-1/2 inches below lower edge of wood nailer.

4. Position roll of TPO sheeting in a manner, which provides sufficient material to facilitate flashing. The roofing membrane shall be unrolled and positioned square with the roof edge. Laps shall be shingled with, or run parallel to, the slope of the roof. Overlap side laps 3 inches and end laps minimum three (3) inches. Install succeeding rolls in same manner. Avoid wrinkles. Reposition sheet when necessary. Do not stretch material unevenly.

5. Fold sheet back so one-half (1/2) of the underside of the sheet is exposed. Ensure the sheet fold is smooth with no wrinkles or buckles.

6. Over the properly installed and prepared surface, TPO Single Ply Bonding Adhesive shall be applied using approved solvent-resistant roller or power roller equipment. The adhesive shall be applied in a smooth even coating with no globs, puddles, voids or similar irregularities. Only areas that can be completely covered in the same day shall be coated with adhesive. The surface with adhesive coating shall be allowed to become tacky prior to installing the roof membrane. Do not allow adhesive to fully dry prior to placing membranes. If the surface dries to the point that it no longer feels tacky re-apply bonding adhesive to substrate at the specified application rate and allow to flash off again to the proper drying condition.

a. Drying time of the adhesive increases with the presence of higher humidity or cooler temperatures.

7. Bonding adhesive shall not be applied to lap (seam) areas that are to be welded to flashings or adjacent membrane sheets by means of hot air welding procedures. If contamination occurs, remove any contaminates prior to hot air welding seams.

8. When the surface is ready, roll the TPO membrane onto the adhesive coated substrate avoiding wrinkles.

9. Using a push broom or membrane roller and positive downward pressure, brush down the bonded half of the membrane sheet to achieve maximum contact.

10. Fold back the unbonded half of the sheet and repeat bonding procedure.

11. Apply adjoining sheets in same manner, lapping edges a minimum of 3”.

12. Any wrinkles found in the splice area or that impedes the flow of water drainage, must be cut out, laid flat and repaired using TPO membrane and standard hot air seam welding procedures.

13. Remove and replace all sheets that are not fully bonded.

14. Mechanically attach membrane sheets at roof perimeter and penetrations. Fasteners shall have 2 3/8 inch diameter barbed metal plates. Fasteners shall be placed a minimum of 12 inches on center and 1-1/8 inch from sheet edge in a true and straight.

15. Minimize foot traffic on freshly applied TPO membrane until adhesive is fully cured.
16. Membrane Seaming:
   a. All edge surfaces to be seamed by hot air welding. Surfaces must be
      wiped with solvent using clean rags.
   b. Heat-weld laps with approved welding equipment. Adjust welding
      speed and temperature base upon ambient conditions and material.

17. Membrane End Laps:
   a. Continuous End Lap Detail
      1) Overlap the previous membrane course of field membrane a
         minimum of 2”. Heat weld membrane lap.
   b. Staggered End Lap Detail
      1) Offset staggered end laps a minimum of 5’.
      2) Overlap the previous course of field membrane a minimum of
         2”. Heat weld membrane lap.
   c. Abutted End Lap Detail
      1) Gap width between membrane sheets shall not exceed 1/8 inch.
      2) Install 6-inch wide cover strip over end lap. Cut cover strip
         corners round. Heat-weld cover strip centered over end lap.

18. Heat-weld a 4” round field cut TPO flashing membrane (unreinforced) centered
    over each T-joint on 60-mil thick or greater membrane.

C. Perimeter/Projection Attachment:
   1. Mechanically attach roofing membrane at roof perimeters, curbs, and pipe/stack
      penetrations greater than 12” in diameter, on both sides of expansion joints and
      other areas where the membrane must be anchored to prevent movement, stress
      or damage to the roofing membrane.
   2. Provide mechanical attachment at deck angle changes in excess of 2”/12”
      (including drain sump areas).
   3. Follow the recommendations of Factory Mutual Loss Prevention Data Sheets 1-28,
      and 1-29 (dated May 2004 or latest edition).

D. Roof Drain Detail:
   1. Prepare substrate around each roof drain to prevent membrane bridging or
      distortion and to provide a smooth transition from the roof surface to the drain
      clamping ring.
   2. Remove existing flashing and bituminous materials from drain components
      down to bare clean metal.
   3. Install tapered edge strip around drain to create approximate 48 by 48 inch sump.
      Miter corners.
   4. Install minimum 1/2 inch bead of drain sealant over entire drain bowl rim
      (approximately 1/2 tube per drain).
   5. Install 2-piece drain flashing detail.
      a. Terminate field membrane along outside edge of sump. Install target
         patch consisting of unreinforced TPO flashing membrane over drain
         sump and past drain bowl rim. Extend flashing a minimum of 3” outside
         of the sump area and heat weld to field sheet.
   6. Clamp flashing collar to drain. Fully compress drain sealant between the new
      membrane and the drain bowl rim forming a solid seal between the two. Evenly
      compress the assembly to avoid cracking or breaking the clamping ring. Replace
      cracked or broken drain clamping rings.
      a. All bolts and/or clamps must be in place in order to provide constant,
         even compression. Missing drain bolts and clamps shall be replaced.
   7. Neatly cut membrane within drain at rim. Membrane to extend 1 inch into bowl.
   8. For working drains, remove drain plug upon completion of work each day.
   9. Plug new drains to prevent water entry until service connection is completed.

E. Membrane Seaming:

07 54 10-8  THERMOPLASTIC MEMBRANE  WCPS – Funkstown Elem. School
            ROOFING  Roof Replacement
1. Clean seam areas, overlap roofing membrane and hot-air weld side and end laps of roofing membrane according to manufacturer's written instructions to ensure a watertight seam installation.

2. All surfaces shall be clean and dry. Ensure both mating surfaces are free of debris and no moisture is present on the splicing surfaces.
   a. Using a clean rag saturated with appropriate cleaner, thoroughly clean seam area at least 4 inches wide on both sheets. Change rags frequently to avoid depositing previously removed materials.

3. Using an approved automatic heat welding machine or hand held heat gun and steel roller, continuously weld a minimum 1 1/2” wide seam. Minimum width of welded lap shall be 1-1/2 inch when using an automatic welder. Hand welds shall be a minimum of 2-inches wide. Only approved Automatic Walker Welders shall be used to weld seams (see Hot Air Welder Equipment).

4. Special attention must be paid to areas where multiple layers of TPO membrane (3 or more) come together (T-joints).
   a. If probing these areas reveals the presence of voids or cold welds on 45 mil membrane, install a 4” round field cut TPO flashing membrane (unreinforced) to the formed T-joint.
   b. A 4” round field cut TPO flashing membrane (unreinforced) is required at each T-joint on 60 mil or greater membrane.

5. Allow hot air welder to warm up. Insert the nozzle tip of the hot air welder into seam area. Move nozzle at a steady speed along the seam area, immediately applying pressure behind the air nozzle with a neoprene roller or weighted wheel to ensure positive contact of the heated TPO roof membrane lap.

6. Test lap edges with probe to verify seam weld continuity.
   a. Verify field strength of seams a minimum of twice daily and repair seam sample areas.
   b. All welded seams must be manually checked for voids or seal deficiencies by probing the entire seam area with a dull cotter key extractor after the seam has cooled. Properly constructed laps will not separate at the lap interface when tested. In addition, there must be destructive testing performed at the beginning of every workday and every time there is an interruption in the welding process (i.e. Power failure, welder shut down and job site conditions change). All deficiencies must be repaired.
   c. Repair tears, voids, and lapped seams in roofing membrane that does not meet requirements.

F. TPO Membrane End Lap Details:
1. Continuous End Lap Detail
   a. Abut end laps. Gap width between membrane sheets shall not exceed 1/8 inch.
   b. Install 6-inch wide cover strip membrane centered over end lap. Cut cover strip corners round. Heat-weld cover strip over end lap.

2. Staggered End Lap Detail
   a. Offset staggered end laps a minimum of 5’.
   b. Abut end laps. Gap width between membrane sheets shall not exceed 1/8 inch.
   c. Install 6-inch wide cover strip membrane centered over end lap. Cut cover strip corners round. Heat-weld cover strip over end lap.

3. Heat weld TPO cover strip.
   a. All surfaces must be clean and dry.
   b. For heat welding, allow the hot air welder to warm up. Insert the nozzle tip of the hot air welder into the seam area. Move nozzle at a steady speed along the seam area, immediately applying pressure behind the air.
nozzle with a neoprene roller or weighted wheel to ensure positive contact of the heated TPO Roof Membrane lap.

c. Minimum width of all welded lap shall be 1.5"

4. Field test heat welded to assure proper construction. Perform field test after lap area cools to ambient temperatures. Properly constructed laps will not separate at the lap interface when tested.

3.08 GENERAL FLASHING REQUIREMENTS AND STRIPPING INSTALLATION

A. Install sheet flashings and preformed flashing accessories and adhere to substrates according to membrane roofing system manufacturer’s written instructions.

B. Clean seam areas, overlap and firmly roll sheet flashings into the adhesive. Weld side and end laps to ensure a watertight seam installation.

C. All flashings shall be installed as shown on the detail drawings. All TPO membrane flashings shall be installed concurrently with the roof membrane as the project progresses. No temporary flashings shall be allowed without prior written approval of the authorized manufacturer’s agent. If any water is allowed to enter under the new roofing due to incomplete flashings, the affected area shall be removed and replaced at Contractor’s expense.

D. Flashings shall not be applied over existing thru-wall flashings or weep holes. All flashings shall extend a minimum of 8-inches above roof level unless previously accepted by Owner and an authorized manufacturer’s agent. All existing flashings shall be removed before applying a new flashing. Install flashings in a neat and uniform manner with a “rounding” of all exposed corners. Care should be taken to ensure that the flashing does not bridge where there is a change of direction.

E. Flash all pipes with TPO Pre-fabricated Flashing Boots where possible. Field fabricate pipe flashings with TPO Flashing Membrane (unreinforced flashing) per standard Manufacturer’s Roofing Systems details when a pre-molded flashing is not feasible.

F. Fabricate all metal flanged flashings using TPO Membrane Coated Metal. Hot air weld a 6-inch wide TPO cover strip to flashing membrane and coated metal flange.

G. Mix adhesive vigorously by hand to achieve a homogeneous blend. DO NOT use electrical equipment or open flame near adhesive. Do not thin adhesive with solvents.

H. Base Flashings Adhered in manufacturer’s TPO Single Ply Bonding Adhesive:

1. Install all new TPO flashing details per manufacturer’s specifications, recommendations and standard detail drawings.
   a. Base flashing system shall consist of fully adhered (60 mil) TPO Perimeter Sheet membrane or (60 mil) Reinforced TPO Field membrane and adhered in Single Ply Bonding Adhesive.
   b. All flashings shall be installed as shown on the detail drawings and per manufacturer’s standards. All membrane flashings shall be installed concurrently with the roof membrane as the project progresses.
   c. Flashings shall not be applied over existing thru-wall flashings or weep holes. All flashings shall extend a minimum of 8-inches above roof level unless previously accepted by Owner and an authorized Tremco agent. All existing flashings shall be removed before applying a new flashing.
   d. Apply TPO Single Ply Bonding Adhesive in full coverage to both the substrate and to the back side of the TPO flashing membrane.
   e. The TPO base flashing membrane shall be fully adhered to a dry, smooth solvent-resistant and compatible substrate using approved bonding adhesive.
f. When the TPO membrane has been cut to correct width and length, embed the flashing into the substrate adhesive, taking care to avoid wrinkles.

g. Over properly prepared surface, TPO Single Ply Bonding adhesive shall be applied using approved solvent-resistant roller or power roller equipment.

1) The adhesive shall be applied at a rate of 1-gallon per every 50 to 60 square feet per side. The adhesive shall be applied in a smooth even coating with no globs, puddles, voids or similar irregularities. Coverage will vary based on substrate porosity.

2) Allow adhesive to dry to a tacky feel when touched with the back side of a dry finger before bonding membrane to substrate. Drying time of the adhesive increases with the presence of higher humidity or cooler temperatures.

3) Do not allow adhesive to fully dry prior to placing membranes. If the surface dries to the point that it no longer feels tacky, re-apply bonding adhesive and allow to flash off to the proper drying condition.

h. Position TPO Flashing membrane in intended location and fold back. Apply TPO Single Ply Bonding Adhesive in full coverage to both the vertical substrate and to the back side of the flashing membrane. Allow adhesive to dry to a tacky feel when touched with the back side of a dry finger before bonding membrane to substrate. Place the flashing membrane onto the vertical substrate and pressure roll to assure positive contact. Do not allow TPO Single Ply Bonding Adhesive to contaminate TPO membrane and flashing lap areas. Remove adhesive from lap areas. Heat-weld overlap seams of TPO flashing and field membrane. Bonding adhesive shall not be applied to lap (seam) areas that are to be welded to flashings or adjacent membrane sheets by means of hot air welding procedures. If contamination occurs, remove any contaminates prior to hot air welding seams.

i. Care should be taken to ensure that the flashing does not bridge where there is a change of direction.

j. Apply consistent pressure to entire surface of elastomeric sheeting using a steel hand roller to achieve full adhesion of the sheet to the flashing substrate. Ensure complete bond and continuity without wrinkles or voids.

k. Clean seam areas and weld side and end laps to ensure a watertight seam installation.

l. The top of the installed flashing shall be fastened under metal counterflashing, coping cap, or through wall metal reglet. The maximum distance between fasteners for TPO flashings shall be 8 inches through flat bar or 12 inches through metal reglet. Install Flash (TF) Tape between masonry walls and top edge of TPO flashing membrane prior to fastening.

m. Install TPO prefabricated universal corners for sealing all inside and outside corners.

n. Fabricate all metal flashings with flanges using TPO Membrane Coated Metal. Secure flange to wood blocking as specified. Heat-weld a 6-inch wide (reinforced) TPO cover strip to flashing membrane and coated metal flange.

I. TPO Coated Metal Edge Flashing:
1. Fabricate and install manufacturer’s TPO coated metal flashing to comply with
details and project drawings and the recommendations of SMACNA Sheet Metal
Manuals for fabrication and Factory Mutual Loss Prevention Data Sheet I-49.
2. All metal work shall be completed in conjunction with the roofing and flashing
operation to provide a daily watertight condition.
3. Metal shall be installed to provide adequate resistance to bending and to allow
for normal thermal expansion and contraction. Allow for minimum 1/4 inches
space between metal joints.
4. Metal flashing shall have a minimum 3 inches wide nailing flange and hemmed
metal edge. Flange shall be no wider than underlying blocking. Metal flashing
shall be fastened to solid wood blocking with annular ring nails, 4 inches o.c.
Fasteners shall penetrate the wood a minimum of 1-1/4 inches.
5. Continuous metal hook strips are required on all metal fascias that exceed 4
inches. Each hook strip shall be fastened 12 inches o.c. into wood blocking or
masonry wall. Hook strips should be continuous and at least 22-gauge. They
should be secured with annular threaded nails long enough to penetrate the wood
1 - 1/4 inches. The nail head should be 3/16 inches minimum. When screws are
used, they should be No. 8 minimum long enough to penetrate wood 3/4 inches
or metal 3/8 inches. Screws should be 24 inches apart in Zone 1 and 16 inches
apart in Zone 2 (refer to FM I-49). Screws should be either corrosion-resistant
steel or treated to resist corrosion. When an existing metal panel wall has no
hook strip, the fascia metal should be fastened directly to the wall with No. 8
galvanized sheet metal screws, through neoprene washers, spaced 24 inches in
Zone 1 and 16 inches in Zone 2.
6. All gravel stops and drip edges with a face larger than 4 inches shall be installed
using a continuous 22 gauge hook strip fastened 12 inches o.c. using galvanized
annular ring nails.
7. Fasten TPO coated metal flashings 4 inches o.c. to treated wood nailers using
galvanized annular ring nails.
8. Install TPO membrane coated metal flashings over field membrane. Flange of
flashing component shall be at the same level as the insulation or other substrate
to which the membrane will be applied.
9. Install adjacent pieces of coated metal flashing with 1/4 inches gap. Apply a 2
inches wide continuous strip of foil tape over the gap to act as a bond breaker.
Hot air weld a 6 inches strip of TPO membrane, over the foil tape, to each piece
of flashing to form a watertight splice.
10. Hot air weld a 6-inch wide TPO cover strip to field membrane and coated metal
dge flashing.

J. Prefabricated Pipe Boots:
1. Remove existing pipe flashing.
2. Install plates and fasteners that secure field sheet as close to the penetration as
possible.
3. Each boot is stepped in increments that will fit standard pipes. The top of the
boot should be cut around the “step” which allows a stretch fit between the top
of the boot over the stack.
4. Place the boot over the vent pipe.
5. Pull the flange down to the roof, stretching the collar portion around the vent
pipe.
6. Inside the top of the boot shall be caulked to prevent water entry and a stainless
steel hose clamp must be installed to secure the top edge of the boot to the vent
pipe.
7. The flange of the boot is pre-scored and shall be cut at the circular score and
then heat-welded (minimum 2”) onto the TPO field membrane.
8. Do not split the boot. If the boot cannot be installed intact, use field fabricated flashing per manufacturer’s details.
9. Manufacturer’s vent pipe boots can only be installed by hot-air heat welding.

K. Prefabricated Universal Corners
1. The manufacturer’s TPO prefabricated corners must be used for sealing the corners of all pitch pans, curbs, and walls. They are uniform in shape and size and provide water tightness at corners formed by TPO coated metal and flashing membrane.
2. The corners shall be cut at the scored lines to form either an inside or outside corner.
3. Use per heat welding techniques to fully weld the corner to the flashing following published manufacturer’s specifications and details.
4. Universal Corners can only be installed by hot-air heat welding.

L. TPO Pitch Pans with Grout:
2. Pack gap between roof-penetrating element and deck with compressible insulation.
3. Nail flange to wood blocking 3 inches o.c., staggered.
4. Strip-in flange with a 6-inch wide TPO cover strip heat welded to field membrane and coated metal edge flashing.
5. Install TPO prefabricated corners.
6. Fill pitch pan to within 1 inch from top with non-shrink grout. Allow to set firm.
7. Fill pitch pan with pourable sealer. Double fill if necessary.
8. Fabricate and install storm collar with drawband over pitch pan. Tighten drawband.

M. TPO Metal sleeve with Storm Collar:
2. Apply a heavy 3/8 inch bead of sealant to roofing surface receiving metal flange.
3. Nail flange to wood blocking 3 inches o.c., staggered.
4. Strip-in flanges with a 6-inch wide TPO cover strip heat welded to field membrane, and coated metal edge flashing.
5. Install TPO prefabricated corners.

3.09 WALKWAY PAD APPLICATION
A. Install walkway pads at roof access points.
B. Heat weld walkway pad to field membrane.
1. Clean, smooth membrane ply surface with soap and water. Allow drying. All surfaces must be clean and dry prior to walkway application.
2. For heat welding, allow the hot air welder to warm up. Insert the nozzle tip of the hot air welder to the attachment area. Move nozzle at a steady speed, immediately applying pressure behind the air nozzle with a neoprene roller or
weighted wheel to ensure positive contact of the TPO Walkway Roll to the roof membrane.

a. Minimum width of welded lap shall be 2.0” and 6.0” long when performing hand welds.

b. Spot weld Walkway Roll to roof membrane. Attachment of walkway roll should not impede drainage.

3. Field test heat welded laps to assure proper construction.
4. Perform field test after lap area cools to ambient temperatures. Properly constructed heat welds will not separate at the lap interface when tested.

3.10 DAILY WATERSTOP/TIE-INS

A. Install Tie-in.
1. Remove embedded gravel/debris from top ply of felt along termination if built-up roofing system is present. Width: 24 inches.
2. Remove dirt and debris from tie-in area. Width: 24 inches.
3. Adhere 12 and 18-inch wide ply sheets from exposed deck to existing roofing with a continuous 1/16 thick application of tie-off mastic. Glaze cut-off with surfacing mastic. Extend 18 inch wide felt 3 inches either side 12-inch felt.
4. Install “deadman” insulation filler at insulation staggers.
5. Extend new roofing membrane at least 24 inches onto prepared area of adjacent existing roofing. Seal edge with 6 inches wide reinforcing membrane embedded between alternate courses of tie-off mastic.
6. Remove temporary connection at beginning of next workday by cutting membrane evenly along edge of existing roof system. Remove “deadman” insulation fillers.

B. Alternate Tie-in:
1. Remove embedded gravel/debris from top ply of felt along termination. Width: 24 inches.
2. Remove dirt and debris from tie-in area. Width: 24 inches.
3. Adhere 12 and 18-inch wide ply sheets from exposed deck to existing roofing with a continuous 1/16 thick application of tie-off mastic. Glaze cut-off with surfacing mastic. Extend 18-inch wide felt 3 inches either side 12-inch felt.
4. Install “deadman” insulation filler at insulation staggers.
5. Extend new roofing membrane at least 24 inches onto prepared area of adjacent existing roofing.
6. Attach TPO membrane ply lap over underlying membrane with adhesive and/or membrane fasteners and seam plates.
7. Apply spray foam over leading edge of tie-in ply lap and exposed membrane fasteners and seam plates.
8. Remove temporary connection at beginning of next workday by cutting membrane evenly along edge of existing roof system. Remove “deadman” insulation fillers.

3.11 FIELD QUALITY CONTROL

A. Final Roof Inspection: Arrange for roofing system manufacturer’s technical personnel to inspect roofing installation on completion.

3.12 PROTECTING AND CLEANING

A. Protect roofing membrane from damage and wear during remainder of construction period. When remaining construction will not affect or endanger roofing, inspect roofing for deterioration and damage, describing its nature and extent in a written report, with copies to project superintendent.
B. Prior to performing work on a completed roof area that may cause damage the new roof, the roofing membrane and flashing shall be protected from physical damage. Proper and adequate protection includes installing a slip-sheet in the work area overlaid with plywood or OSB Board in order to dissipate the effects of traffic on the finished roof surface and to prevent impact damage to the system caused by dropped tools and or equipment. If damage does occur to the roof system it must be immediately repaired in order to preserve the integrity of the roof insulation.

C. Correct deficiencies in or remove roofing that does not comply with requirements, repair substrates, reinstall roofing, and repair base flashings to a condition free of damage and deterioration at the time of Substantial Completion and according to warranty requirements.

D. Clean over spray and spillage from adjacent construction using cleaning agents and procedures recommended by manufacturer of affected construction.

E. Contractor shall be responsible for vehicles and other property that is contaminated by cold adhesive over spray or drippage.

END OF SECTION
PART 1 — GENERAL

1.01 SUMMARY
A. This section includes flashing details, metals and installation instructions included on all roof sections covered under the scope of work.

1.02 RELATED DOCUMENTS
A. Drawings and contract documents, including Section 01 01 00 - Summary of Work, apply to this section.

1.03 RELATED SECTIONS
A. Section 02 22 50 Demolition
B. Section 04 90 00 Masonry Restoration
C. Section 05 50 00 Metal Fabrications
D. Section 06 11 40 Wood Blocking and Curbing
E. Section 07 22 20 Roof and Deck Insulation
F. Section 07 52 20 Hybrid Composite Built-Up Asphalt Roofing
G. Section 07 54 10 Thermoplastic Membrane Roofing
H. Section 07 90 00 Joint Sealers
I. Section 09 90 00 Paints and Coatings
J. Section 15 01 10 Mechanical / Electrical General Requirements
K. Section 15 16 00 Roof Drains

1.04 REFERENCES:
A. SMACNA - Sheet Metal and Air Conditioning Contractors National Association, Inc.
B. ASTM - American Society for Testing and Materials, West Conshohocken, PA.
C. NRCA - National Roofing Contractors Association, Chicago, IL
D. UL - Underwriter’s Laboratory, Northbrook, IL.

1.05 PROJECT CONDITIONS:
A. The following details are included in the low-slope roof section involved with this roofing project:
   1. Wall Flashing on Wall Supported Deck
   2. Wall Flashing for Non - Wall Supported Deck
   3. Roof Drain
   4. Pitch Pocket with Grout
   5. Metal Sleeve and Storm Collar
   6. Plumbing Vent Flashing
   7. Wood Curb
   8. Metal Curb
   9. Curb for Air Handling Unit
  10. Expansion Joint
11. Daily Waterstop / Tie-In
12. Gauge & Thickness Guide (Minimum)

PART 2 — PRODUCTS

2.01 FREE FLOATING FASCIA/GRAVEL STOP

A. .050 Formed Aluminum Fascia with galvanized metal cant continuous; continuous galvanized retainer; 10’ lengths, min. 4” joint splice plates; 8” nominal face. Provide pre-formed corners (inside/outside), extenders and other components as needed. Mill/galvanized finish. ANSI/SPRI ES-1 F.M. approved.

2.02 METAL COPING

A. Metal Copings: Aluminum, .063 inch thick, shaped as indicated, with continuous cleat and splice plates. Include cover plates to conceal and weatherseal joints and attachment flanges. Provide extruded closure plates as required and mitered, welded corners. Mill/galvanized finish. ANSI/SPRI ES-1 F.M. approved. Provide 20 year finish warranty. No exposed fasteners.

2.03 METAL FLASHINGS

A. Stainless Steel Metal Flashings:
   1. Type 304, ASTM A 167-88, mill rolled number 2D finish.

B. Two-Piece Counterflashings:
   1. Re-use existing counterflashing receiver where applicable.
   2. New counterflashing shall match existing receiver type.

C. Roof Drain and Plumbing Stacks Flashing:

D. Roof Drain Gravel Guard:
   1. Stainless steel: Type 304, ASTM A 167-88, mill rolled number 2D finish.
      a. Gage: Twenty-two (22).

E. Details not addressed in specification shall be in accordance with Architectural Sheet Metal Manual, as issued by Sheet Metal and Air Conditioning Contractors’ National Association, Inc., (SMACNA).

2.04 ACCESS LADDER

A. Steel Roof Ladder (bolted to masonry wall per Section 05 50 00) with cage:
   1. Fixed ladder with walk-thru handrails. Ladder shall be one-piece welded assembly.
      a. Side members: 1/4” x 2” x 2” steel angle or as detailed on drawings with 3/4” corrugated steel round climbing rungs on 12” centers.
      b. Standoff mounting brackets: 7”
   3. Provide safety cage designed to OSHA specifications with flared bottom opening for easy entry when ladder heights exceed required limits.
4. Paint primed ladder and cage with 2-coats of OSHA safety yellow.

2.05 MECHANICAL FASTENERS
A. Stainless sheet steel to wood blocking:
   1. FS FF-N-105B (3) Type II, Style 20, roofing nails; galvanized steel wire, flat head, diamond point, round, barbed shank.
   2. Length: Sufficient to penetrate wood blocking 1-1/4 inches minimum.
B. Aluminum sheet metal to wood blocking:
   1. FS FF-N-105B (3) Type II, Style 20, roofing nails; 6061-t913 alloy wire, flat head, diamond point, round, barbed shank
   2. Length: Sufficient to penetrate wood blocking 1-1/4 inches.
C. Termination bar to masonry/concrete:
   1. Lead masonry anchors.
   2. Length: Sufficient to provide 1-1/4 inches embedment minimum.

2.06 ACCESSORY MATERIALS
A. Elastomeric mastic for fascia cover plate: One Part Urethane Caulk.
B. Asphaltic mastic: Roof mastic.
C. Metal cleaner: Mineral spirits
D. Pipe supports: Triangle Pipe Supports
E. Drawband:
   1. Gold Seal stainless steel worm gear clamp by Murray Corporation, Cockeysville, MD.
   2. Power-Seal stainless steel worm drive clamps by Breeze Clamp Company, Saltsburg, PA
F. Termination bar:
   1. Aluminum, with caulk receiver: 1/4 by 1 inch
   2. Primer: Non-Porous Primer by Tremco.
   3. Caulking: One Part Urethane Caulk
G. Pitch Pan Materials:
   2. Top fill: Solvent Free Flashing Adhesive.
   3. Pourable Sealer: One Component Poly Urethane Sealant, gun grade, moisture cured, resists UV and Ozone.
I. Heat Pump/Condenser Risers – Equal to Diversitech #HPR-65 Pressure Injection Molded Polypropylene with butyl mastic on top and bottom.

2.07 FLASHING MATERIALS
A. Elastomeric Flashing Sheeting. (BUR System)
   1. Elastomeric sheeting compounded from bend of EPDM and SBR thermoset elastomers reinforced with polyester waxed scrim and meets the requirements of ASTM D 5019, Type I, Grade II, CSPE sheet; thickness .045-inch.
B. Stripping ply for flashings ply laps:
   1. Reinforcing Mesh.
a. Glass-Fiber Fabric: Woven glass reinforcement treated with organic resin and complying with ASTM D 1668, Type III.
   b. Size: 6 inches minimum.

C. Stripping ply for 2-ply stripping of metal flange flashings:
1. Base layer of 2-ply stripping ply:
   a. Base Ply Felt.
      6 inches, minimum.
2. Top layer of 2 ply stripping ply:
   a. Base Ply Felt.
   b. 3 inches beyond base layer (9 inches minimum).
3. Stripping ply adhesive: Cold Applied Adhesive
4. Primer for metal flanges:
   a. Water based Primer.
   b. Low (VOC) Volatile Primer.

D. Flashing Sealant Tape:
1. Teflon Tape: Flexible butyl based sealant tape.
2. Dimensions: 1/8 inch by 1 inch.

E. Asphalt Primer:
1. Water-Based Asphalt Primer: Water-based, polymer modified, asphalt primer
2. Low VOC Compliant Asphalt Primer: Solvent-based asphalt primer.

F. Solvent-Free Elastomeric Roofing Mastic: One-part, solvent-free, asbestos-free, low-odor elastomeric roof mastic specially formulated for compatibility and use with specified roofing membranes and flashings.

G. Asphalt Roofing Mastic: One-part, asbestos-free, cold-applied mastic specially formulated for compatibility and use with specified roofing membranes and flashings and meets the requirements of ASTM D 4586, Type II, Class 1.

H. Flashing Coating: Reflective Aluminum Coating; Type I, heat-reflective, non-fibered, aluminum pigmented roof coating that meets the requirements of ASTM D 2824; provide min. two (2) coats.

PART 3 — EXECUTION

3.01 GENERAL FLASHING REQUIREMENTS

A. Install Elastomeric Flashing using flashing adhesive:
1. Adhere elastomeric sheeting completely to flashing surface, cant, and roofing with a ¼ inch notched trowel at 1 gallon per 12 sq. ft. of flashing adhesive, immediately embed elastomeric sheeting into the flashing adhesive.
2. Apply consistent pressure to entire surface of elastomeric sheeting using a steel hand roller to achieve full adhesion of the sheeting to the flashing substrate. Ensure complete bond and continuity without wrinkles or voids. Lap sheeting ends 6 inches. Adhere laps with flashing adhesive.
3. Seal horizontal edges of sheeting to roof surface and vertical edges of sheeting with reinforcing membrane embedded in a base course of flashing adhesive mastic and a top course of elastomeric flashing adhesive.
4. Elastomeric sheeting width: sufficient to extend at least 6 inches beyond toe of cant onto new roof.
5. Secure top edge of flashing membrane with metal termination bar and Teflon Tape. Fasten bar 6 to 8 inches o.c. Seal termination bar with three-course reinforcing mesh and asphaltic mastic as required.
B. Two Ply stripping for metal flanges:
   1. Set flange in asphalt mastic. Seal flange with two stripping plies embedded between alternate applications of stripping adhesive/bitumen. Extend first ply 3 inches beyond flange; second ply 3 inches beyond first ply.

3.02 SURFACING TREATMENT ON FLASHINGS

A. Surfacing Treatment for Flashings:
   1. Prepare surface as required by roofing system manufacturer.
   2. Apply Aluminum Coating over exposed flashing membrane surfaces. Install two applications of aluminized heat-reflective coating at an approximate rate of 130 to 200 square feet per gallon per coat.

3.03 FLASHING INSTALLATION

A. Pre-engineered, Metal Fascia Gravel Stop (Free Floating Fascia) Fascia System:
   1. Install new roofing to blocking edge to replace defective blocking. Nail with spiral or annular shank nails, 8 inches on center.
   2. Install extruded aluminum free-floating fascia system according to manufacturer’s published instructions.
      a. Install new Free Floating Metal Extender Fascia as required to accommodate new wood blocking thickness.
      b. Use pre-fabricated corers.
      c. Minimum fascia length: 24 inches, 2 deck brackets minimum.
      d. Elastomeric sheeting shall be of sufficient width that after being inserted and secured by fascia top cap, will extend at least 6 inches onto new roof.
      e. Adhere sheeting to cant and roofing in a uniform and continuous application of flashing adhesive.
      f. Seal horizontal and vertical edges of sheeting with reinforcing membrane embedded in a base course of elastomeric flashing adhesive and a top course of modified asphalt mastic.

B. Wall flashings - reglet counterflashing:
   1. Extend new roofing to top edge of cant.
   2. Install elastomeric base flashing described in general flashing requirements section.
   3. Secure top edge of flashing membrane to vertical substrate with termination bar secured 6 to 8 inches o.c. maximum
   4. Fabricate and install new counterflashing.
   5. Install counterflashing into reglet joint and secure with lead wedges 8 inches o.c. maximum.

C. Wall flashings - surface mounted counterflashing:
   1. Extend new roofing to top edge of cant.
   2. Install elastomeric base flashing described in general flashing requirements section.
   3. Secure top edge of flashing membrane to vertical substrate with termination bar secured 6 to 8 inches o.c. maximum
   4. Wipe top of bar clean with metal cleaner. Prime metal surface to receive sealant with metal primer. Allow to dry.
   6. Fabricate and install new counterflashing.
7. Install surface mount counterflashing with flashing tape. Mechanically fasten 8 inches o.c. maximum.
   Caulk flashing joint. Provide watershed. Tool neatly.

D. Two-piece reglet mounted counterflashing:
1. Extend new roofing to top edge of cant.
2. Install elastomeric base flashing described in general flashing requirements section.
3. Secure top edge of flashing membrane to vertical substrate with termination bar secured 6 to 8 inches o.c. maximum.
4. Re-use existing counterflashing receiver where applicable.
5. When wall flashings are completed, attach counterflashing by sliding it in at the outside open end of the receiver. Once counterflashing is locked into receiver, insert fasteners through all prepunched holes.
6. Stagger counterflashing joints and receiver joints 6” (152 mm) minimum with 1/4” (6 mm) gap between each joint. Neatly trim length of counterflashing section to fit.
7. After counterflashing is installed, attach each joint plate to the bottom of the counterflashing while lifting upward and locking it to the top of the receiver. Tap the top of Joint plate at receiver with rubber mallet to lock together.
8. Once entire system is installed, prime receiver with non-porous primer and apply a bead of reglet joint sealant.

E. Wall flashing(s) for non-wall-supported deck:
1. Install horizontal and vertical blocking.
2. Install wood cants to blocking.
3. Extend new roofing to top edge of cant.
4. Install elastomeric base flashing described in general flashing requirements section.
5. Secure top edge of flashing membrane to substrate with spiral or annular shank nails, with 1-inch cap, 8 inches o.c.
6. Install vinyl water barrier over joint opening. Allow barrier to drape down into the joint opening down to the deck. Nail both sides of barrier 4 inches o.c.
7. Insert fiberglass batt insulation into expansion joint opening; fill entire opening.
8. Install counterflashing over expansion joint into reglet and secure with lead wedges 8 inches o.c.

F. Expansion joint(s):
1. Extend new roofing to top edge of cant.
2. Install elastomeric base flashing described in general flashing requirements section.
3. Install vinyl water barrier over joint opening. Allow barrier to drape down into the joint opening down to the deck. Nail both sides of barrier 4 inches o.c.
4. Insert fiberglass batt insulation into expansion joint opening; fill entire opening.
5. Secure top edge of flashing membrane to substrate with spiral or annular shank nails, with 1-inch cap, 8 inches o.c.
6. Center and attach base sheet liner to top of curb and drape down each side of vertical curb 1-inch minimum.
7. Fabricate and install expansion joint cover to curb.
   a. Bevel curb top for drainage:
   b. Mechanically fasten to vertical portion of curb with neoprene-grommetted screws 18 inches o.c.
   c. Overlap sections 1 inch. On the top face, form a standing seam.
G. Area Dividers:
1. Extend new roofing to top edge of cant.
2. Install elastomeric base flashing described in general flashing requirements section.
3. Secure top edge of flashing membrane to substrate with spiral or annular shank nails, with 1-inch cap, 8 inches o.c.
4. Fabricate and install expansion joint cover to curb
   a. Bevel curb top for drainage
   b. Mechanically fasten to vertical portion of curb with neoprene-grommetted screws 18 inches o.c.
   c. Overlap sections 1 inch.

H. Curb flashings:
1. Remove mechanical equipment from curb when applicable.
2. Raise curb to accommodate new insulation height.
3. Install new roofing to top edge of cant.
4. Install elastomeric base flashing described in general flashing requirements section.
5. Secure top edge of flashing to substrate with termination bar; mechanically fasten 8 inches o.c. maximum.
6. Wipe top of bar clean with metal cleaner. Prime metal surface to receive sealant with metal primer. Allow to dry.
8. Fabricate and install counterflashing.

I. Slip metal counterflashing:
1. Install new roofing to top edge of cant.
2. Install elastomeric base flashing as described in general flashing requirements section.
3. Secure top edge of flashing to substrate with termination bar; mechanically fasten 8 inches o.c. maximum.
4. Wipe top of bar clean with metal cleaner. Prime metal surface to receive sealant with metal primer. Allow to dry.
6. Fabricate and install sheet metal counterflashing behind existing metal coping cap, counterflashing, or water table. Fasten counterflashing every 12 inches o. c. using lead masonry anchors or appropriate fastener for other substrate as determined by superintendent.

J. Roof drain flashing with gravel guard:
1. Install tapered edge strip around drain to create approximate 48 by 48 inch sump. Miter corners. Seal toe of tapered edge to drain rim with reinforcing membrane embedded between alternate courses of asphalt mastic.
2. Install roofing system into sump and onto drain rim.
3. Plug drain to prevent water entry until service connection is completed.
4. Prime the bottom side of the lead flashing.
5. Apply 1/16-inch uniformly thick layer of asphalt mastic to surface receiving lead flashing.
6. Set single piece lead flashing 36 by 36 inch in mastic centered over drain; rim neatly dress lead with wood block.
7. Clamp flashing collar to drain in bed of mastic.
8. Neatly cut lead/felts within drain at rim. Lead to extend 1 inch into bowl.
9. Prime lead with asphalt primer.
10. Install two (2) ply stripping. Stripping shall not extend under clamping ring.
11. Install new gravel guard.
12. For working drains, remove drain plug upon completion of work each day.

K. Lead plumbing vent flashing:
1. Wedge plumbing vent tight against deck.
2. Apply 1/16-inch uniformly thick layer of asphalt mastic to surface receiving metal flange.
4. Prime metal flange with asphalt primer.
5. Pipe outside diameter greater than 2 inches: Bend lead inside pipe 1-inch minimum with pliers or rubber/plastic mallet; replace cracked lead.
6. Pipe outside diameter 2 inches or less: Cut lead at vent top; fabricate and install integral lead cap.

L. Metal sleeve with storm collar:
1. Apply 1/16-inch uniformly thick layer of asphalt mastic to surface receiving metal flange.
3. Nail flange to wood blocking 3 inches o.c., staggered.
4. Prime flange with asphalt primer.
5. Install two (2) ply stripping described in general flashing requirements section.

M. Pitch pans with grout:
2. Pack gap between roof-penetrating element and deck with compressible insulation. Seal with reinforcing membrane embedded between alternate courses of asphalt mastic.
3. Nail flange to wood blocking 3 inches o.c., staggered.
4. Prime metal flange, projection, and pitch pan interior with asphalt primer.
5. Install two (2) ply stripping described in general flashing requirements section.
6. Fill pitch pan to within 1 inch from top with non-shrink grout. Allow to set firm.
7. Fill pitch pan with specified mastic. Double fill if necessary.
8. Fabricate and install umbrella with drawband over pitch pan. Tighten drawband.

N. Access Ladder and Cage: (per Section 05 50 00)
1. Install roof access ladder and related components where specified.
   a. All fastening, design, and height requirements to comply with local, state and Federal codes for access ladders.
   b. Mount ladder guard per manufacturer’s instruction.
2. Attach ladder to masonry wall.
3. Install walk pad under leg support.

O. Through Wall Counterflashing
1. Fabricate through-wall counterflashing to dimensions shown on drawings. All joints to be soldered.
2. Form through-wall flashing with integral counterflashing receiver to extend through brick masonry and up interior masonry back-up wall 4 inches min.
3. Set vertical leg of counterflashing in full bed of butyl sealant and secure with term bar 6” o.c.
4. Prime masonry back-up wall and vertical leg of counterflashing.
5. Provide continuous 8 inch wide self adhering modified bitumen interior vertical leg and onto back-up wall. Provide 4-inch wide end laps on modified bitumen.
6. Insert counterflashing into receiver.
7. Extend new roofing to top edge of cant.
8. Install elastomeric base flashing described in general flashing requirements section
9. Secure top edge of flashing membrane to vertical substrate with termination bar secured 6 to 8 inches o.c. maximum

END OF SECTION
PART 1 GENERAL

1.01 SECTION INCLUDES
   A. Preparing substrate surfaces.
   B. Sealant and joint backing.

1.02 RELATED SECTIONS
   A. Section 04 90 00 – Masonry Restoration and Cleaning
   B. Section 07 22 20 – Roof and Deck Insulation
   C. Section 07 52 20 – Hybrid Composite Built-up Asphalt Roofing
   D. Section 07 54 10 – Thermoplastic Membrane Roofing
   E. Section 07 62 00 – Sheet Metal Flashing and Trim.

1.03 REFERENCES
   A. ASTM C790 - Use of Latex Sealing Compounds.
   B. ASTM C804 - Use of Solvent-Release Type Sealants.
   C. ASTM C834 - Latex Sealing Compounds.
   D. ASTM C919 - Use of Sealants in Acoustical Applications.
   E. ASTM C920 - Elastomeric Joint Sealants.
   F. ASTM D1056 - Flexible Cellular Materials - Sponge or Expanded Rubber.
   H. SWRI (Sealant, Waterproofing and Restoration Institute) - Sealant and Caulking Guide Specification.

1.04 SUBMITTALS
   A. Submit under provisions of Section 01 30 00.
   B. Product Data: Provide data indicating sealant chemical characteristics, performance criteria, substrate preparation, limitations, and color availability.
   C. Samples: Submit two samples, 1 x 4 inch in size illustrating sealant colors for selection.
   D. Manufacturer's Installation Instructions: Indicate special procedures, surface preparation, and perimeter conditions requiring special attention.

1.05 QUALITY ASSURANCE
   A. Perform work in accordance with sealant manufacturer's requirements for preparation of surfaces and material installation instructions.
1.06 QUALIFICATIONS
   A. Manufacturer: Company specializing in manufacturing the Products specified in this section with minimum three years documented experience.
   B. Applicator: Company specializing in performing the work of this section with minimum three (3) years documented experience and approved by manufacturer.

1.07 DELIVERY, STORAGE AND HANDLING
   A. Delivery of Materials:
      1. Deliver materials to job-site in new, dry, unopened and well-marked containers showing product and manufacturers name.
      2. Deliver materials in sufficient quantity to allow continuity of work.
      3. Coordinate delivery with project superintendent.
   B. Do not order project materials or start work before receiving written notice to proceed. No work shall commence without signed contracts.
   C. Storage of Materials:
      1. Store materials marked “KEEP FROM FREEZING” in areas where temperatures will remain above 40°
      2. Do not store materials in open or in contact with ground or roof surface.
      3. Store all materials on a raised platform covered with secured canvas tarpaulin (not polyethylene), top to bottom. Cover all materials when project is not in progress and maintain the ability at all times to cover the materials when required, such as during an unanticipated rain shower.
      4. Subcontractor shall assume full responsibility for the protection and safekeeping of products stored on premises.

1.08 ENVIRONMENTAL REQUIREMENTS
   A. Maintain temperature and humidity recommended by the sealant manufacturer during and after installation.
   B. Environmental requirements:
      1. Do not work in rain, snow, or in presence of water.
      2. Do not work in temperatures below 40°
      3. Do not install materials marked “KEEP FROM FREEZING” when daily temperatures are scheduled to fall below 40° F.
      4. Do not perform masonry work below 40°
      5. Remove any work exposed to freezing.
      6. Coordinate with WTI superintendent when volatile materials are to be used near air ventilation intakes so owner can use some or all of the following methods to minimize disruptions to building occupants and operations:
         7. Divert air intake from work area by attaching scoops or temporary ductwork.
         8. Temporarily shut down or block air intakes.
         9. Provide make-up air or intake air from sources away from work area.

1.09 COORDINATION
   A. Coordinate work with other trades.
   B. Coordinate the work with all sections referencing this section.
1.10 WARRANT

A. Upon Project completion and Owner’s acceptance effective upon complete payment the Contractor shall issue a guarantee against defective workmanship for a period of 5 years.

B. Manufacturer’s standard form, in which manufacturer agrees to repair or replace sealants that fail in materials within the specified warranty period. Refer to Section 01 70 00.
   1. Silicone Sealants: 10 year
   2. Polyurethane Sealants: 5 year

PART 2 PRODUCTS

2.01 APPROVED MANUFACTURERS

A. Pecora
B. Tremco
C. Bostik
D. Substitutions shall be submitted in accordance with Section 01 60 00.

2.02 SEALANTS

A. Polyurethane Sealant (Type B) Masonry locations: ASTM C920, Grade NS, Class A, chemical curing, non-staining, non-bleeding, capable of continuous water immersion, non-sagging type; color as selected; Dynatrol II manufactured by Pecora.
   1. Elongation Capability 50 percent
   2. Service Temperature Range -20 to 180 degrees F
   3. Shore A Hardness Range 20 to 35

B. Silicone Sealant (Type C): ASTM C920, Grade NS, Class 25, Use NT; single component, fungus resistant, chemical curing, non-sagging, non-staining, non-bleeding; color as selected; 860 manufactured by Pecora or Tremco TremSEAL S
   1. Elongation Capability 25 percent
   2. Service Temperature Range -75 to +400 degrees F
   3. Shore A Hardness Range 15 to 50

C. Polyurethane Sealant:
   1. Equal to Tremco TremSEAL D and TremSEAL GP.
   2. One part, moisture cured urethane, general purpose sealant; low modulus, non-sag resistant to UV, ozone, and moisture asbestos free.
   3. Color: As selected by Owner.

D. Silicone Sealants: (Roof Locations)
   1. Equal to Tremco TremSEAL S.
   2. One part, high performance, moist curing silicone sealant; low modulus, non-sag, resistant to UV, ozone, and moisture asbestos free.

2.03 ACCESSORIES

A. Primer: Non-staining type, recommended by sealant manufacturer to suit application.
   1. Primer for concrete or masonry surfaces prior to applying urethane sealants: Primer #1.
   2. Primer for metal surfaces prior to applying urethane sealants: Non-Porous Primer.
3. Primer for non-porous materials for silicone sealants: Primer #10
4. Primer for porous materials for silicone sealants: Primer #23

B. Joint Cleaner: Non-corrosive and non-staining type, recommended by sealant manufacturer; compatible with joint forming materials.

C. Joint Backing: ASTM D1565; round, open cell polyethylene foam rod; oversized 30 to 50 percent larger than joint width.

D. Bond Breaker: Pressure sensitive tape recommended by sealant manufacturer to suit application.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that substrate surfaces and joint openings are ready to receive work.
B. Verify that joint backing and release tapes are compatible with sealant.
C. Do not begin work until all unsatisfactory conditions are corrected. Beginning work constitutes acceptance of conditions.

3.02 PREPARATION

A. Remove loose materials and foreign matter which might impair adhesion of sealant.
B. Clean and prime joints in accordance with manufacturer's instructions.
C. Perform preparation in accordance with manufacturer's instructions.
D. Protect elements surrounding the work of this section from damage or disfiguration.

3.03 GENERAL WORKMANSHIP

A. All work performed by subcontractor shall conform to this specification.
B. The presence and activity of the manufacturer's representative, architect's representative, and/or owner's representative shall in no way relieve subcontractor of contract responsibilities or duties.
C. Substrate temperature shall be within 50°F to 110°F for product application. At no time shall temperature exceed 110°F during application and cure.

3.04 SURFACE PREPARATION

A. The surface of joints to receive sealants shall be free of all frost, condensation and moisture. Oil, grease dirt, chalk, particles of mortar, dust, loose mill scale, caulking and other foreign substances shall be removed from surfaces of joints to be in contact with the sealant. Oil and grease shall be removed with solvent and surfaces shall be wiped dry with clean clothes. All surfaces shall be ground free of existing sealants, caulking and abraded to clean mortar or stone.
B. Remove loose particles present or resulting from grinding, abrading or blast cleaning by sweeping particles out with a dry brush, blowing out joints with oil free compressed air or by vacuuming joints prior to solvent cleaning.
C. Clean only as much area that can be primed, packed and caulked in a single day.
3.05 INSTALLATION OF BACKER-ROD MATERIAL

A. When using backup material comprised of tubular or rod stock, avoid lengthwise stretching of the material. Do not twist or braid backer material.

B. Installation tool:
1. Do not puncture the exterior skin or surface of the backer material.
2. For installation of backup material, provide a blunt-surfaced tool of wood or plastic, having shoulders designed to ride on the adjacent finished surface and a protrusion of the required dimensions to assure uniform depth of backup material below the sealant.
3. Do not use a screwdriver or similar tool for this purpose.
4. Using the approved tool, smoothly and uniformly place the backup material to the depth indicated on the drawings or otherwise required, compressing the backer material 25% to 50% and securing a positive fit. Do not insert the depth of the backer material beyond 1/2".

3.06 INSTALLATION OF SEALANTS

A. Prior to start of installation of each joint, type according to the details on the drawings and verify that the required proportion of width of joint to depth of joint ration has been secured.
1. One-part general purpose sealant joint size criteria:
   a. Minimum size of joint shall be four times the anticipated movement.
   b. Joint depth to be 1/4 inch for joints 1/4 inch to 2 inch in width.
   c. Maximum joint size approximately 1 1/4" width x 3/8" depth in a single application.

B. Equipment
1. Apply sealant under pressure with power actuated hand gun or manually operated hand gun, or by other appropriate means.
2. Use guns with a nozzle of proper size, and providing sufficient pressure to completely fill the joints as designed.
3. If multi-component sealants are used, a two blade mixing paddle is required in the mixing process.

C. Thoroughly and completely mask joints where the appearance of primer or sealant on adjacent surfaces would be objectionable.

D. Temperature: Install all work of this section when substrate surface temperature is above 40°F and below 140°F unless the applicator obtains prior approval from the sealant manufacturer to install material outside of this temperature range.

E. Moisture: Do not apply work of this section on surfaces which are wet, damp, or have frost.

F. Install the sealant in strict accordance with the manufacturer's recommendations, thoroughly filling joints to the recommended width and depth.

G. Dry tool exposed joints to force material against backing material causing the caulking to obtain full surface contact with the joint interfaces. Finished joint will have a slightly concave surface, be uniform and neatly finished.

H. Cleaning up:
1. Remove masking tape immediately after joints have been tolled.
2. Keep clean adjacent surfaces free from excess sealant as the installation progresses, using solvent or cleaning agent recommended by the sealant manufacturer.

3. Upon completion of the work of this section, promptly remove from the job site all debris, empty containers, and surplus material derived from this portion of the work.

3.07 ADJUSTING AND CLEANING

A. Repair of deficiencies:
   1. Installations of details noted as deficient during final inspection must be repaired and corrected by applicator, and made ready for re-inspection, within five (5) working days.

B. Clean-up:
   1. Immediately upon job completion, roof membrane, flashing surfaces, ground and surrounding areas shall be cleaned of debris.

3.08 PROTECTION OF FINISHED WORK

A. Protect finished installation under provisions of Section 01 60 00.

B. Protect sealants until cured.

END OF SECTION
DIVISION 9

FINISHES

BUSHEY FEIGHT MORIN ARCHITECTS INC.
473 NORTH POTOMAC STREET
HAGERSTOWN, MARYLAND 21740
301-733-5600     FAX: 301-733-5612
PART 1 GENERAL

1.01 SUMMARY

A. Section includes surface preparation and field application of paints. Paint all exposed fans, drain guards, ladders, ventilators, etc. or as directed by Owner. Paint steel lintels.

1.02 RELATED SECTIONS:

A. Section 04 90 00 Masonry Restoration
B. Section 07 41 00 Metal Wall Panels
C. Section 05 50 00 Metal Fabrications
D. Section 07 52 20 Hybrid Composite Built-Up Asphalt Roofing
E. Section 07 62 00 Sheet Metal Flashing and Trim
F. Section 07 90 00 Joint Sealers
G. Section 15 16 00 Roof Drains

1.03 REFERENCES

C. NACE (National Association of Corrosion Engineers) - Industrial Maintenance Painting.
F. SSPC (Steel Structures Painting Council) - Steel Structures Painting Manual.

1.04 DEFINITIONS

A. Conform to ASTM D16 for interpretation of terms used in this section.

1.05 SUBMITTALS

A. Product Data: Submit data on all finishing products.
B. Samples: Submit two color chip selection charts/wheels illustrating range of colors and textures available for each surface finishing product scheduled.
C. Submit material safety data sheets for all products used.
D. Manufacturer's Installation Instructions: Submit special surface preparation procedures and substrate conditions requiring special attention.
E. Operation and Maintenance Data: Submit data on cleaning, touch-up, and repair of painted and coated surfaces.
1.06 DELIVERY, STORAGE, AND HANDLING
A. Deliver products to site in sealed and labeled containers; inspect to verify acceptability.
B. Container Label: Include manufacturer's name, type of paint, brand name, lot number, brand code, coverage, surface preparation, drying time, cleanup requirements, color designation, and instructions for mixing and reducing.
C. Paint Materials: Store at minimum ambient temperature of 45 degrees F and a maximum of 90 degrees F, in ventilated area, and as required by manufacturer's instructions.

1.07 ENVIRONMENTAL REQUIREMENTS
A. Do not apply materials when surface and ambient temperatures are outside the temperature ranges required by the paint product manufacturer.
B. Do not apply exterior coatings during rain or snow when relative humidity is outside the humidity ranges, or moisture content of surfaces exceed those required by the paint product manufacturer.
C. Minimum Application Temperatures for Latex Paints: 45 degrees F for interiors; 50 degrees F for exterior, unless required otherwise by manufacturer's instructions.

1.08 REGULATORY REQUIREMENTS
A. Conform to applicable code for flame and smoke rating requirements for finishes.

PART 2 PRODUCTS

2.01 PAINTS AND COATINGS
A. Manufacturers: Paint
   1. Duron Inc.
   2. Sherwin Williams.
   3. ICI Paint Stores
   4. PPG Architectural Finishes.
B. Manufacturers: Primer Sealers
   1. Duron Inc.
   2. Sherwin Williams
   3. PPG Architectural Finishes.
C. Aluminum Coating: Per Section 07 52 20, Article 2.10.J.

2.02 COMPONENTS
A. Coatings: Ready mixed, except field-catalyzed coatings. Prepare coatings:
   1. To a soft paste consistency, capable of being readily and uniformly dispersed to a homogeneous coating.
   2. For good flow and brushing properties.
   3. Capable of drying or curing free of streaks or sags.
B. Accessory Materials: Linseed oil, shellac, turpentine, paint thinners and other materials not specifically indicated but required to achieve the finishes specified; commercial quality.
C. Patching Materials: Latex filler.
D. Fastener Head Cover Materials: Latex filler.
PART 3 EXECUTION

3.01 EXAMINATION
   A. Verify that surfaces or substrate conditions are ready to receive Work as instructed by the product manufacturer.
   B. Examine surfaces scheduled to be finished prior to commencement of work. Report any condition that may potentially affect proper application.
   C. Test shop applied primer for compatibility with subsequent cover materials.
   D. Coordinate with other trades, ensure all joints are sealed and caulked. Prime paint at joints when necessary before finish coats.

3.02 PREPARATION
   A. Surfaces: Correct defects and clean surfaces, which affect work of this section. Remove existing coatings that exhibit surface and/or loose defects.
   B. Galvanized Surfaces: Remove surface contamination and oils and wash with solvent. Apply coat of etching primer.
   C. Concrete and Unit Masonry Surfaces Scheduled to Receive Paint Finish: Remove dirt, loose mortar, scale, salt or alkali powder, and other foreign matter. Remove oil and grease with a solution of tri-sodium phosphate; rinse well and allow to dry. Remove stains caused by weathering of corroding metals with a solution of sodium metasilicate after thoroughly wetting with water. Allow to dry.
   D. Uncoated Steel and Iron Surfaces: Remove grease, mill scale, weld splatter, dirt, and rust. Where heavy coatings of scale are evident, remove by power tool wire brushing or sandblasting; clean by washing with solvent. Apply a treatment of phosphoric acid solution, ensuring weld joints, bolts, and nuts are similarly cleaned. Spot prime paint after repairs.
   E. Shop Primed Steel Surfaces: Sand and scrape to remove loose primer and rust. Feather edges to make touch-up patches inconspicuous. Clean surfaces with solvent. Prime bare steel surfaces.
   F. Galvanized Surfaces: Remove surface contamination and oils and wash with solvent. Apply coat of etching primer.
   G. Interior Wood Items Scheduled to Receive Paint Finish: Wipe off dust and grit prior to priming. Seal knots, pitch streaks, and sappy sections with sealer. Fill nail holes and cracks after primer has dried; sand between coats.

3.03 EXISTING WORK
   A. Extend existing paint and coatings installations using materials and methods compatible with existing installations and as specified.

3.04 APPLICATION
   A. Apply products in accordance to manufacturer’s instructions.
   B. Do not apply finishes to surfaces that are not dry. Allow applied coats to dry before next coat is applied.
   C. Apply each coat to uniform appearance. Apply each coat of paint slightly darker than preceding coat unless specified otherwise.
   D. Sand wood and metal surfaces lightly between coats to achieve required finish.
E. Vacuum clean surfaces of loose particles. Use tack cloth to remove dust and particles just prior to applying next coat.

3.05 CLEANING AND SCHEDULE

A. Collect waste materials that may constitute a fire hazard, place in closed metal containers, and remove daily from site.

B. Steel (Ferrous Metals) – Normal and atmospheric conditions (All structural and misc. steel).
   1. First coat touch up primer: PPG 6-212 3.6 mwf/coat.
   2. Second and third coats: PPG Speedhide all-purpose house paint. Low-gloss, oil alkyd - 4.0 mwf/coat.

C. Zinc Coated Metal - Galvanized Steel
   1. Location: All exterior zinc coated or galvanized steel miscellaneous metals and lintels.
   2. System: Urethane/Acrylic
      a. Surface: Preparation SPG-9E
      b. Primer: Pitt-Tech 90-708 @ 5.1 WFT
      c. Finish (2 coats): Manor Hall 75-line @ 3.2 WFT per coat.

D. Roof top equipment – paint all exhaust fan housings, vents, and other exposed items with roofing product equal to Double Duty Aluminum LV per section 07 52 20, two coats

END OF SECTION
1.01 RELATED DOCUMENTS
A. Drawings and contract documents, including Section 01 01 00 - Summary of Work, apply to this section. Owner will specify which mechanical units and plumbing items need to be replaced, altered, or removed.

1.02 SUMMARY
A. This section specifies requirements for the following Scope of Work:
1. Mechanical disconnection, extension, shortening, and/or reconnection shall be performed in accordance with 2015 International Mechanical Code with applicable local amendments.
2. Electrical disconnection, extension, shortening, and/or reconnection shall be performed in accordance with the 2014 National Electric Code.
3. Plumbing work shall be performed in accordance with the 2015 International Plumbing Code and the Maryland State Plumbing Regulations.
4. Details, not shown or specified but necessary for proper installation and operation shall be included within the work as though specified herein.

1.03 RELATED SECTIONS
A. Section 01 01 00 Summary of Work
B. Section 01 60 00 Product Requirements
C. Section 01 70 00 Contract Closeout
D. Section 02 22 50 Demolition
E. Section 05 50 00 Metal Fabrications
F. Section 06 11 40 Wood Blocking and Curbing.
G. Section 07 22 20 Roof and Deck Insulation
H. Section 07 41 00 Metal Wall Panels
I. Section 07 52 20 Hybrid Composite Built-Up Asphalt Roofing
J. Section 07 54 10 Thermoplastic Membrane Roofing
K. Section 07 62 00 Sheet Metal Flashing and Trim
L. Section 07 90 00 Joint Sealers
M. Section 09 90 00 Paints and Coatings
N. Section 15 16 00 Roof Drains

PART 2 — PRODUCTS
Not Used
PART 3 — EXECUTION

3.01 GENERAL

A. Mechanical, electrical, and associated work shall be performed by licensed tradesman as an approved contractor, pre-qualified by Washington County Public Schools, and shall comply with the applicable code requirements.

B. Wherever possible match the existing mechanical and electrical components.

C. Handle, store, and protect equipment and materials to prevent damage before and during installation.

END OF SECTION
PART 1 — GENERAL

1.01 RELATED DOCUMENTS
   A. Drawings and contract documents, including Section 01 01 00 - Summary of Work, apply to this section.

1.02 SUMMARY
   A. This section includes the replacement of all existing roof drains, strainers and installation of new roof drains with strainer, and pipe to first elbow. Replace first elbow as well. Insulate drain bowls and piping.

1.03 RELATED SECTIONS
   A. Section 01 01 00 Summary of Work
   B. Section 01 60 00 Product Requirements
   C. Section 01 70 00 Contract Closeout
   D. Section 05 50 00 Metal Fabrications
   E. Section 06 11 40 Wood Blocking and Curbing.
   F. Section 07 22 20 Roof and Deck Insulation
   G. Section 07 52 20 Hybrid Composite Built-Up Asphalt Roofing
   H. Section 07 54 10 Thermoplastic Membrane Roofing
   I. Section 07 62 00 Sheet Metal Flashing and Trim
   J. Section 07 90 00 Joint Sealers
   K. Section 09 90 00 Paints and Coatings
   L. Section 15 01 10 Mechanical/Electrical General Requirements

1.04 QUALITY ASSURANCE
   A. Codes and standards: Comply with provisions of the following codes and standards.

PART 2 — PRODUCTS

2.01 MANUFACTURERS
   A. Manufacturers: Provide prefabricated roof specialties fabricated by one of the following:
      2. Zurn Industries, Inc.
      4. Approved equal by Owner.
2.02 ROOF DRAINS

A. New Roof Drain Bowl Components:
   1. Large size cast iron roof drain bowl assembly and related plumbing connections.
      a. Standard: ASME A112.21.2M.
   2. Fasteners: Metal compatible with material and substrate being fastened.
   3. Metal Accessories: Sheet metal strips, clamps, anchoring devices, and similar accessory units required for installation; matching or compatible with material being installed.

B. Drain Bowl Metal Flashings:
   1. Lead Sheet: ASTM B 749, Type L51121, copper bearing, with the following minimum weights and thicknesses, unless otherwise indicated - 4.0-lb/sq. ft.
   2. Copper Sheet: ASTM B 152/B 152M, of the following minimum weights and thicknesses, unless otherwise indicated - 12-oz./sq. ft.

2.03 INSULATION

A. Insulate new drain bowl and piping components.
   1. New roof drains and drain pipes shall be insulated with a minimum of one inch (1") thick Fiber Glass Pipe insulation.
   2. Pipe insulation shall be manufactured by John-Manville, Owens-Corning, or approved equal. Each assembly shall meet NFPA 255 requirements; not exceeding a flame spread rating of 25 or a smoke development of 50, except as otherwise specified.
   3. Pipe insulation shall be factory molded tubular insulation with factory-applied jacket as specified below.
   4. Type I, one inch (1") thick, three (3) pounds density fibrous glass, 35 degrees F to 360 degrees F with tough white Kraft paper as service jacket and 0.03 aluminum, foil vapor barrier.
   5. All elbows and fittings shall be insulated and then covered with Zeston type pre-molded covers.

PART 3 — EXECUTION

3.01 EXAMINATION

A. Verify that the dimensions are correct and substrate is in proper condition for installation. Correct unsatisfactory conditions before proceeding with installation.

B. Verify elevation of drain to provide positive drainage.
   1. Verify difference in insulation height between existing and specified insulation does require lowering or raising of existing drain(s).
   2. If existing drains are raised above deck level, drains shall be lowered to create sump area if new insulation thickness does not accommodate for a sump.
   3. Raise or lower roof drain bowl assemblies as required to match the new roof system elevation. Work shall include plumbing connections and accessories.

3.02 PREPARATION

A. Remove bitumen, gravel, debris, adhesives, etc., from existing drain and pipe inlet. Ensure that surface of drain and pipe inlet is clean and dry; employ hot air gun if necessary to remove moisture. Verify that I.D. of existing drain does not exceed O.D. of new outlet by more than 1/4 inch.
B. Verify that deck opening is sufficient to accommodate the O.D. of connector.

3.03 ROOF DRAIN INSTALLATION
A. Install drain components per manufacturer’s written instructions.
B. Install roof drains at low points of roof areas according to roof membrane manufacturer's written installation instructions.
C. Install drain bowl flashing collar or flange so that there will be no leakage between drain and adjoining roofing. Maintain integrity of waterproof membranes where penetrated. Where possible, position roof drains for easy access and maintenance.

3.04 CLEANING
A. Flush all drains to verify free flowing: The roofing contractor is responsible for ensuring all roof drains included in the specified roof replacement work are free flowing. Flush drains to verify free flowing prior to the project start and at the project completion. Contractor shall notify Owner if roof drains are found slow flowing or inoperative prior to the project start.

END OF SECTION