



The following documentation is an electronically-submitted vendor response to an advertised solicitation from the *West Virginia Purchasing Bulletin* within the Vendor Self-Service portal at wvOASIS.gov. As part of the State of West Virginia's procurement process, and to maintain the transparency of the bid-opening process, this documentation submitted online is publicly posted by the West Virginia Purchasing Division at WVPurchasing.gov with any other vendor responses to this solicitation submitted to the Purchasing Division in hard copy format.

Header 6

List View

- General Information**
- Contact
- Default Values
- Discount
- Document Information
- Clarification Request

Procurement Folder: 1856665

Procurement Type: Central Purchase Order

Vendor ID: VS0000014990

Legal Name: VERTEX ROOFING CONTRACTORS INC

Alias/DBA:

Total Bid: \$651,000.00

Response Date: 02/17/2026

Response Time: 18:43

Responded By User ID: neckley02

First Name: Nicole

Last Name: Eckley

Email: nicole@vertexroofinc.com

Phone: 7037942121

SO Doc Code: CRFQ

SO Dept: 0803

SO Doc ID: DOT2600000052

Published Date: 2/4/26

Close Date: 2/18/26

Close Time: 13:30

Status: Closed

Solicitation Description: Removal, Repair, & Replacement of The District 8 HQ Roof

Total of Header Attachments: 6

Total of All Attachments: 6

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	Roofing Service				651000.00

Comm Code	Manufacturer	Specification	Model #
72152601			

Commodity Line Comments:

Extended Description:

REMOVAL, REPLACEMENT, AND REPAIR OF DISTRICT 8 HEADQUARTERS ROOF



Department of Administration
 Purchasing Division
 2019 Washington Street East
 Post Office Box 50130
 Charleston, WV 25305-0130

**State of West Virginia
 Centralized Request for Quote
 Construction**

Proc Folder: 1856665		Reason for Modification:	
Doc Description: Removal, Repair, & Replacement of The District 8 HQ Roof		ADDENDUM NO_1 Attach pre-bid Sign-in Sheets	
Proc Type: Central Purchase Order			
Date Issued	Solicitation Closes	Solicitation No	Version
2026-02-04	2026-02-18 13:30	CRFQ 0803 DOT2600000052	2

BID RECEIVING LOCATION

BID CLERK
 DEPARTMENT OF ADMINISTRATION
 PURCHASING DIVISION
 2019 WASHINGTON ST E
 CHARLESTON WV 25305
 US

VENDOR

Vendor Customer Code: VS0000014990
Vendor Name : Vertex Roofing Contractor Inc
Address : 12050
Street : Cadet Ct
City : Manassas
State : VA **Country :** USA **Zip :** 20109
Principal Contact : Jonathan Zimmer
Vendor Contact Phone: 703-794-2121 **Extension:**

FOR INFORMATION CONTACT THE BUYER

John W Estep
 304-558-2566
 john.w.estep@wv.gov

Vendor
 Signature X

FEIN# 45-3744003

DATE 02/17/2026

All offers subject to all terms and conditions contained in this solicitation

ADDITIONAL INFORMATION

ADDENDUM NO_1

Addendum No_1 issued to publish and distribute the attached information to the Vendor Community

REQUEST FOR QUOTATION:

The West Virginia Purchasing Division is soliciting bids on behalf of West Virginia Division of Highways (WVDOH) to establish a contract for the removal of existing roof, repair of the existing deck, and the one-time purchase of installation and materials of a standing seam metal roof system. Per the Bid Requirements, Specifications, Terms and Conditions attached to this solicitation.

INVOICE TO		SHIP TO	
DIVISION OF HIGHWAYS DISTRICT EIGHT - ALL LOCATIONS PO BOX 1516 ELKINS WV US		DIVISION OF HIGHWAYS DISTRICT EIGHT - HEADQUARTERS 1101 N. RANDOLPH AVE. ELKINS WV US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	Roofing Service				

Comm Code	Manufacturer	Specification	Model #
72152601			

Extended Description:
REMOVAL, REPLACEMENT, AND REPAIR OF DISTRICT 8 HEADQUARTERS ROOF

SCHEDULE OF EVENTS

<u>Line</u>	<u>Event</u>	<u>Event Date</u>
1	Pre-Bid Meeting 10:00am D8 HQ Elkins	2026-02-03
2	Tech Questions due by 10:00am	2026-02-11

	Document Phase	Document Description	Page
DOT2600000052	Final	Removal, Repair, & Replacement of The District 8 HQ Roof	3

ADDITIONAL TERMS AND CONDITIONS

See attached document(s) for additional Terms and Conditions

REQUEST FOR QUOTATION
District 8 HQ Roof Replacement
1121 N Randolph Ave, Elkins, WV 26241

GENERAL CONSTRUCTION SPECIFICATIONS (No AIA Documents)

1. **PURPOSE AND SCOPE:** The West Virginia Purchasing Division is soliciting bids on behalf of West Virginia Division of Highways (WVDOH) to establish a contract for the removal of existing roof, repair of the existing deck, and the one time purchase of installation and materials of a standing seam metal roof system.

The Vendor shall furnish all materials, labor, and equipment necessary to complete all Construction Services. The Vendor shall furnish any incidental work, materials, labor, and equipment that are necessary to complete the Construction Services, even if such incidental work is not explicitly included in the Project Plans.

2. **DEFINITIONS:** The terms listed below shall have the meanings assigned to them below. Additional definitions can be found in section 2 of the General Terms and Conditions and in the Project Plans as defined below.

2.1 **“Construction Services”** means removal of existing roof and installation of a complete standing seam metal roof as more fully described in the Project Plans and Specifications Manual..

2.2 **“Pricing Page”** means the pages contained in wvOASIS, attached hereto as Exhibit A, or included in the Project Plans upon which Vendor should list its proposed price for the Construction Services.

2.3 **“Solicitation”** means the official notice of an opportunity to supply the State with Construction Services that is published by the Purchasing Division.

2.4 **“Project Plans”** means documents developed by an architect, an engineer, the Agency, or another design professional, which are attached hereto as Exhibit B, that provide detailed instructions on how the Construction Services are to be performed. In the event that Project Plans contain drawings or other documents too large to attach in Exhibit B, Vendors can obtain copies in accordance with Section 9 of these Specifications.

3. **ORDER OF PRECEDENCE:** This General Construction Specifications document will have priority over, and supersede, anything contained in the Project Plans.

4. **QUALIFICATIONS:** Vendor, or Vendor’s staff if requirements are inherently limited to individuals rather than corporate entities, shall have the following minimum qualifications:

4.1. **Experience:** Vendor, or Vendor’s supervisory staff assigned to this project, must have successfully completed at least five (5) projects that involved work similar to that described in these specifications or the Project Plans. Compliance with this experience requirement

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will be determined prior to contract award by the State through references provided by the Vendor upon request, through knowledge or documentation of the Vendor's past projects, through confirmation of experience requirements from the architect assisting the State in this project, or some other method that the State determines to be acceptable. Vendor must provide any documentation requested by the State to assist in confirmation of compliance with this provision. References, documentation, or other information to confirm compliance with this experience requirement may be requested after bid opening and prior to contract award.

5. **CONTRACT AWARD:** The Contract is intended to provide Agency with a purchase price for the Construction Services. The Contract will be awarded to the lowest qualified responsible bidder meeting the required specifications. If the Pricing Pages contain alternates/add-ons, the Contract will be awarded based on the grand total of the base bid and any alternates/add-ons selected.
6. **SELECTION OF ALTERNATES:** Pursuant to W. Va. Code § 5-22-1(f), any solicitation of bids shall include no more than five alternates. Alternates, if accepted, shall be accepted in the order in which they are listed on the bid form. Any unaccepted alternate contained within a bid shall expire 90 days after the date of the opening of bids for review. Determination of the lowest qualified responsible bidder shall be based on the sum of the base bid and any alternates accepted.
7. **PERFORMANCE:** Vendor shall perform the Construction Services in accordance with this document and the Project Plans.
8. **SUBSTITUTIONS:** Any substitution requests must be submitted in accordance with the official question and answer period described in the INSTRUCTIONS TO VENDORS SUBMITTING BIDS, Paragraph 4. Vendor Question Deadline. Vendors submitting substitution requests should submit product brochures and product specifications during the official question and answer period.
9. **PROJECT PLANS:** The checked box will apply to Project Plans for this solicitation.
 - No Additional Project Plan Documents:** There are no additional Project Plans other than those attached hereto as Exhibit B or any subsequent addenda modifying Exhibit B.
 - Additional Project Plan Documents:** There are additional Project Plan documents other than those attached as Exhibit B. Copies of the additional Project Plan documents not attached as Exhibit B can be obtained by contacting the entity identified below.

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10. CONDITIONS OF THE WORK

10.1. Permits: The Vendor shall procure all necessary permits and licenses to comply with all applicable Federal, State, or Local laws, regulations and ordinances of any regulating body.

10.2. Existing Conditions: If discrepancies are discovered between the existing conditions and those noted in the specifications, Vendor must immediately notify the Agency's representative. Vendor must also immediately notify the Agency if suspected hazardous materials are encountered.

10.3. Standard Work Hours: The standard hours of work for this Contract will be Monday through Friday from 8:00 am to 6:00pm excluding holidays recognized by the State of West Virginia. Any work outside of the standard hours of work must be approved in advance at the Agency's sole discretion. Authorization of work outside of the standard hours of work will not entitle Vendor to additional compensation.

10.4. Project Closeout: Project Closeout shall include the following:

10.4.1. Final Cleanup: Vendor shall perform the final cleanup activities listed below, along with any other final cleanup activities normally associated with the work performed under this Contract, prior to final inspection:

10.4.1.1. Remove all rubbish, waste, litter, waste material, and other foreign substances from the project site.

10.4.1.2. Remove all tools, machinery, surplus material, and construction equipment from the project site.

10.4.1.3. Sweep all floors and paved areas broom clean and remove any spills or stains.

10.4.1.4. Vacuum carpets removing debris and excess nap.

10.4.1.5. Clean all interior and exterior surfaces, removing all dirt, debris, and stains.

10.4.1.6. Clean transparent materials including glass and mirrors.

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10.4.1.7. Remove all non-permanent labels.

10.4.1.8. Remove debris and surface dust from limited access spaces, including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces.

10.4.1.9. Clean ducts, blowers, and coils if units were operated without filters during construction or that display contamination with particulate matter on inspection. Clean exposed surfaces of diffusers, registers, and grilles. Clean permanent air filters and replace disposable air filters.

10.4.1.10. Wipe surfaces of mechanical and electrical equipment and similar equipment. Remove excess lubrication, paint and mortar droppings, and other foreign substances.

10.4.1.11. Clean plumbing fixtures removing stains including those from water exposure.

10.4.2. Final Inspection: Vendor shall participate in a final inspection with the Agency's project manager. The purpose of the final inspection will be to identify deficiencies that need to be remedied prior to Agency's final acceptance of the work. Vendor shall at all times be obligated to perform in accordance with the Contract and must take all actions necessary to ensure that work complies with requirements of Contract prior to final acceptance. Final acceptance does not waive or release Vendor from its obligation to ensure that work complies with the Contract requirements. Vendor shall submit any warranty documents to the Agency project manager at final inspection.

11. FACILITIES ACCESS: Performance of Contract Services may require access cards and/or keys to gain entrance to Agency's facilities. In the event that access cards and/or keys are required:

11.1. Vendor must identify principal service personnel which will be issued access cards and/or keys to perform service.

11.2. Vendor will be responsible for controlling cards and keys and will pay replacement fee, if the cards or keys become lost or stolen.

11.3. Vendor shall notify Agency immediately of any lost, stolen, or missing card or key.

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11.4. Anyone performing under this Contract will be subject to Agency's security protocol and procedures.

11.5. Vendor shall inform all staff of Agency's security protocol and procedures.

12. MISCELLANEOUS:

12.1. Contract Manager: During its performance of this Contract, Vendor must designate and maintain a primary contract manager responsible for overseeing Vendor's responsibilities under this Contract. The Contract manager must be available during normal business hours to address any customer service or other issues related to this Contract. Vendor should list its Contract manager and his or her contact information below.

Contract Manager: Jonathan Zimmer

Telephone Number: 703-794-2121

Fax Number: 

Email Address: Jon@vertexroofin.com

REQUEST FOR QUOTATION
District 8 HQ Roof Replacement
1121 N Randolph Ave, Elkins, WV 26241

EXHIBIT A – Pricing Page

DATE: February 18, 2026

NAME OF VENDOR: Vertex Roofing Contractors, Inc.

The aforementioned, hereinafter called Vendor, being familiar with and understanding the Bidding Documents and having examined the sites and being familiar with all local conditions affecting the project hereby proposes to furnish all labor, material, equipment, supplies and transportation and to perform all Work in accordance with the Bidding Documents within the time set forth for the sum of:

TOTAL BID AMOUNT: Six Hundred Fifty One Thousand Dollars

For the sum of: \$ 651,000.00

(Show amount in both words and numbers)

REQUEST FOR QUOTATION
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EXHIBIT B – PROJECT PLANS

Please see attached Exhibit B

District 8 HQ Roof Replacement
Exhibit B

SECTION 00 72 00

GENERAL CONDITIONS

PART 1 — GENERAL

1.1 DEFINITIONS

- A. The contract document consists of the AGREEMENT, the GENERAL CONDITIONS of the contract, the DRAWINGS and the SPECIFICATIONS, including all revisions hereto.
- B. The Owner, the Contractor and the Owner's Representative shall be indicated as such throughout these documents. The term Contractor as used herein shall designate the successful bidder to whom the roof contract is awarded.
- C. The term Owner shall be understood to be the WV Division of Highways.
- D. The term Owner's Representative shall be understood to mean the representative of the primary material manufacturer.

1.2 OWNER'S REPRESENTATIVE STATUS

- A. The Owner's Representative shall have general Rights of Inspection of the work and is the agent of the Owner in all matters pertaining to the work as provided in the Contract Documents. The Owner's Representative has the authority to stop work whenever such stoppage may be necessary to ensure the proper execution of the contract and shall have authority to reject any and all materials, whether worked or unworked, if such materials are not in accordance with the plans and specifications.

1.3 CONTRACT DOCUMENTS

- A. Execution of the Contract by the Contractor is a representation that the Contractor has visited the site, become familiar with all existing site conditions, site access, physical characteristics of the site and other relevant local conditions under which the Work is to be performed and correlated personal observations with requirements of the Contract Documents. Contractor acknowledges and agrees that Contract Documents have been thoroughly reviewed and inspected, that it has had the opportunity to seek, and has sought, clarification or explanation of any perceived ambiguity, discrepancy, error or omission in the Contract Documents, and that the Contract Documents are adequate and sufficient to provide for the completion of the Work. Furthermore Contract Documents include all Work, whether or not shown or described, which reasonably may be inferred to be required or useful for the completion of the Work in accordance with all applicable laws, codes and professional standards.

1.4 CONDITION OF SITE

- A. The bidders shall visit the site before submitting their bids and determine the field conditions affecting their work. In considering the bids, the Owner will assume that the bidders are aware of all items, pertinent to their work and have made allowance for the same in their bids.

1.5 VERIFICATION OF DIMENSIONS AND ELEVATIONS

- A. Dimensions and elevations indicated on the drawings in reference to existing structures or utilities are the best available data but are not guaranteed by the Owner or its representatives and the Owner or its representatives will not be responsible for their accuracy. Before bidding on any paperwork dependent upon the data involved, the Contractor shall field check and verify all dimensions, grades, lines, levels or other conditions of limitations at the site to avoid construction errors. If any work is performed by the Contractor or any of its Subcontractors prior to adequate verification or applicable data, any resultant extra cost for adjustment of work as required to conform to existing limitations, shall be assumed by the Contractor without reimbursement or compensation by the Owner.

1.6 PROTECTION OF OWNER'S OPERATIONS

- A. The Contractor shall erect such barriers, tarpaulins, doors, etc., as may be necessary to protect the Owner's operations while work is in progress. Any such openings that are essential to carrying on the work shall be securely closed by the Contractor when not in use to protect the Owner's operations.

1.7 PROTECTION OF WORK AND PROPERTY

- A. The Contractor shall maintain adequate protection of all in progress or completed Work from damage and shall protect the Owner's and adjacent property from injury or loss arising from this contract. Contractor shall provide and maintain at all times any danger signs, guards and/or obstructions necessary to protect the public and workmen from any dangers inherent with or created by the work in progress. Contractor shall hold the Owner harmless from any loss arising due to injury or accident to the public or workmen, or from theft of materials stored at the job site. All materials will be stored in locations other than on roof surfaces except as necessary and shall then be placed on plywood or other type of material to protect the roof surface at all times.
- B. Should the Contractor suffer injury or damage to person or property because of an act or omission of the Owner or of any of the Owner's employees or agents for whose act the Owner is legally liable, the claim shall be made in writing to the Owner within thirty (30) days after the first observance of such injury or damage, otherwise such claim shall be waived. This clause shall not allow claims for injury or damages, which are otherwise precluded by these Contract Documents. The owner shall not be responsible for actions or inactions of other Contractors.

- C. Before starting any work, the Contractor shall protect all grounds, copings, paving and exterior of all buildings where work will be performed.
- D. In those areas where materials and/or hot asphalt will be raised to the roof area, a protective covering shall be placed from the base of the wall extending up and over the top edge of the roof. This coverage shall be wide enough to assure that the exterior walls do not become stained or soiled during roofing operations.
- E. Any areas of the building or grounds which have become stained or damaged in any way shall be repaired or replaced by the Contractor prior to the final inspections. The method of repair used must be acceptable to both the Owner and the Owner's Representative.

1.8 MATERIAL STORAGE AND CLEAN-UP

- A. The Contractor shall keep the premises free from rubbish at all times and shall arrange material storage so as not to interfere with the Owner's operations. At the completion of the job, all the unused material and rubbish shall be removed from the site. The ground shall be raked clean, and the building shall be broom cleaned.
- B. If the Contractor refuses at any time to remove Work debris from the premises, or to keep the working area clean, such cleaning will be completed by the Owner and deducted from the balance due the Contractor provided twenty-four (24) hours written notice by the Owner.
- C. The Contractor shall also remove drippage of bitumen or adhesive from all walls, windows, floors, ladders and finished surfaces. Failure to do so will result in the work being done by others and the cost shall be deducted from the balance due the Contractor.
- D. Materials must be delivered with the manufacturer's label intact and legible. Labels must be affixed to the outside of the package stating the type of product, name and address of the manufacturer. All materials shall be stored and protected against weather, vandalism, and theft. Any materials found to be damaged or missing shall be replaced by the Contractor at no cost to the Owner.

1.9 INSPECTION OF WORK

- A. Where the drawings or specifications require the inspection and approval of any work in progress by the Owner's Representative, the Contractor shall give that Representative ample notice to allow for scheduling the inspection, which shall be made promptly to avoid delay of work. If work has progressed without the required inspections or approval by the Owner's Representative, it shall be uncovered for inspection at the Contractor's expense.
- B. Uncovering of work not originally inspected or uncovering questioned work may be ordered by the Owner's Representative and it shall be done by the Contractor. If

examination proves such work to be incorrectly done or not done in accordance with the plans and specifications, the Contractor shall bear all cost of the reexamination. If the work is proven correctly installed, all such expenses shall be borne by the Owner.

1.10 INSPECTION OF WORK IN PROGRESS AND UPON COMPLETION

- A. If directed by the Owner's Representative, the Contractor shall cut not more than four (4) cores of approximately 200 square inches each, from every newly constructed roof area, in order to establish the number of materials used per square foot and shall restore all such areas to sound and watertight conditions as prior to the core testing.
- B. In the event that such core cuts disclose any deficiency in materials, or soundness of construction, the Contractor shall, at its own expense, apply additional materials or otherwise correct the deficiencies to the satisfaction of the Owner's Representative.
- C. Noncompliance with the terms of this specification and ensuing contract can result in either the cancellation of the contract, or complete replacement of the defective areas at the Contractor's expense. In the event of cancellation, the Owner will not be obligated to compensate the Contractor for any work undertaken in a defective manner.
- D. If the Contractor fails to correct Work which is not in accordance with the requirements of the Contract Documents or 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, 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.
- E. If the Contractor fails within twenty-four hours after receipt of written notice from the Owner to commence and continue correction of any default or neglect to Work as required in the Contract Documents, the Owner may, without prejudice to other remedies the Owner may have, commence and continue to carry out or correct deficiencies in the Work. In such a case, the Contract Sum shall be adjusted for all costs incurred by the Owner in the correction of such deficiencies. If payments then or thereafter due the Contractor are not sufficient to cover such amounts, the Contractor shall pay the difference to the Owner. The right of the Owner to correct the Work shall not give rise to any duty on the part of the Owner to exercise this right for the benefit of the Contractor or any other person or entity.
- F. The Contractor shall promptly correct Work rejected by the Owner or failing to conform to the requirements of the Contract Documents, whether observed before or after completion and whether or not fabricated, installed or completed. The

Contractor shall bear costs of correcting such rejected Work, including additional testing and inspection services and expenses made necessary thereby.

- G. Damages caused by water infiltration resulting from the failure of the Contractor to secure each day's work in a weather tight manner, will be corrected at the Contractor's expense. Included as damages will be all labor costs incurred by the Owner as a result of such water infiltration.
- H. The Owner will require the Owner's Representative to examine the work in progress, as well as upon completion, in order to ascertain the extent to which the materials and procedures conform to the requirements of these specifications and to the published instructions of the Manufacturer.
- I. The authorized Owner's Representative shall be responsible for:
 - 1. Keeping the Owner informed on a periodic basis as to the progress and quality of the work.
 - 2. Calling to the attention of the Contractor those matters is considered to be in violation of the contract requirements.
 - 3. Reporting to the Owner any failure or refusal of the Contractor to correct unacceptable practices.
 - 4. Conducting preliminary and subsequent job-site meetings with the Contractor's official job representative.
 - 5. Supervising the taking of test cuts, and the restoration of such areas.
 - 6. Rendering any other inspection services which the Owner may designate; and
 - 7. Certifying, after completion of the work, the extent to which the Contractor has complied with these specifications as well as to the published instructions of the Manufacturing Company.
- J. The presence and activities of the Owner's Representative shall in no way relieve the Contractor of contractual responsibilities.
- K. 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. Contractor shall bear all related costs of such tests, inspections and approvals, including the cost of retesting for verification of compliance with the requirements of the Contract Documents, and all such costs shall be included in the Contract Sum.

1.11 CHANGES OR EXTRA WORK

- A. The Owner may, without invalidating the original contract, order such changes or additions as may from time to time be deemed desirable. In so doing, the contract

price shall be adjusted, as stated below, with all work being done under the conditions of the original contract except for such adjustments in extension of time as may be acceptable to the Owner. The value of such extra work shall be determined in one of the following ways:

1. By firm adjustment.
 2. By cost plus with a guaranteed maximum.
 3. By cost with a fixed fee; or
 4. By unit cost.
- B. If agreement is reached that the extra cost shall be handled as per methods 2, 3, or 4, the Contractor shall keep and compile a correct amount of the cost together with such vouchers, etc., as may be necessary to substantiate the same for presentation to the Owner. The Owner's Representative shall have authority to make minor job changes or additions as may be necessary to expedite the job providing such changes do not involve additional material cost. No major change or addition shall be made except upon receipt by the Contractor of a signed order from the Owner authorizing such a change. No claims for an extra to the contract price shall be valid unless so authorized.
- C. All work covered by unit prices submitted by the Contractor in the Bid must be covered by a written work order. The Owner's Representative will prepare the work order in triplicate covering the quantity of work and the total cost of the work. The work order which will be written at the end of each day, will be signed by the Owner's Representative and the Contractor's foreman and/or superintendent.

1.12 CORRECTION OF WORK PRIOR TO FINAL PAYMENT

- A. The Contractor shall promptly remove any work that does not meet the requirements of the plans and specifications or is incorrectly installed or otherwise disapproved by the Owner or the Owner's Representative as failing to meet the intent of the plans and specifications. The Contractor shall promptly replace any such work without expense to the Owner and shall bear the cost of making good all work of other contractors, or the Owner, destroyed or damaged by such removal or replacement.

1.13 CORRECTION OF WORK AFTER FINAL PAYMENT

- A. The Contractor shall promptly remove any work that does not meet the requirements of the drawings and specifications or is incorrectly installed or otherwise disapproved by the Owner or the Owner's Representative as failing to meet the intent of the plans and specifications. The Contractor shall promptly replace any such work without expense to the Owner and shall bear the cost of making good all work of other contractors, or the Owner, destroyed or damaged by such removal or replacement.

1.14 DEDUCTION FOR UNCORRECTED WORK

- A. If the Owner deems it unacceptable to have the Contractor correct work which has been incorrectly done, a deduction from the contract price shall be agreed upon, therefore. Such a deduction from the contract price shall in no way affect the Contractor's responsibility for defects that may occur nor its ability for correcting them, and damage caused by them.

1.15 JOB CONDITIONS

- A. All surfaces to be covered shall be smooth, dry, and free from dirt, debris, and foreign material before any of this Work is installed. Pumping equipment shall be located on the ground at a safe distance from building; the location being subject to the approval of the Owner. The Contractor shall be responsible for guarding against fires and shall provide suitable fire extinguishers conveniently located at the site. Competent operators shall be in attendance at all times equipment is in use. Materials shall be stored neatly in areas designated by the Owner and dispersed so as to present a minimum fire hazard. Loads placed on the roof at any point shall not exceed the safe load for which the roof is designed.
- B. There is NO SMOKING allowed on Owner property and the Contractor shall be responsible for enforcement of this job rule at all times with its personnel.
- C. The Contractor should be aware of the Owner's property when tearing off the existing roof. This is required for removal of dirt, silt, debris, roof membrane and insulation from the roof surface in order to preserve the ecology, eliminate unsightly conditions and protect building faces. Specific locations will be discussed at the pre bid conference.
- D. Rolled Roofing Materials: All rolled roofing materials must be stored standing on end on a pallet or otherwise raised off of the roof. The materials are to be covered in a proper manner to assure that they will not become wet prior to application. Any materials that become wet or damaged must be removed from the jobsite and replaced at the Contractor's expense.
- E. Ladders: Any ladders used on this project must be in good condition. The ladder must also be secured at the roof line at all times while in use. All ladders must be O.S.H.A. approved.
- F. No drugs or alcoholic beverages are permitted on the grounds.
- G. The Contractor shall place necessary barriers and/or protection around or under all work in areas where its operations involve risk of injury.
- H. The Contractor will also protect the building structure from damage in the process of the job. In the event that damage does occur to any property or equipment, or the Owner's work in process, notification must be made within two (2) working days of the incidents to the Owner and Owner's Representative.

- I. During the progress of the job, if waste material and rubbish are found or damage resulting from the Contractor's operations is found, or the Contractor does not comply with the requirement by keeping the premises free of accumulations and correct the damage, it shall be the Owner's prerogative to hire qualified personnel to do so; and the cost of this work will be deducted from the balance due the Contractor.
- J. Existing roof top equipment walls, windows, etc. shall be completely protected by masking or other effective methods. Any mastics or asphalt must be cleaned off metal surfaces.
- K. The Contractor is responsible for protecting all materials from the elements. If any material, such as insulation, becomes wet, it cannot be installed and must be replaced at the Contractor's expense. NOTE: Insulation and rolled roofing materials must be covered with waterproof tarps at the end of each workday. Plastic wrappers supplied by the insulation manufacturer are not acceptable substitutes for tarps. The Owner's Representative will reject any covering method material which does not adequately protect roofing materials
- L. Anyone guilty of willful destruction or unlawful removal of company property will be dismissed from the job and is subject to prosecution by law.
- M. Any lawns damaged by Contractor vehicles will be restored with a stand of grass at the Contractor's expense. Any damaged pavements will likewise be restored at the Contractor's expense.
- N. The Contractor must verify that all materials can be installed to accommodate the building design, pertinent codes and regulations, and the Manufacturer's current recommendations
- O. The Contractor will ensure that all substances are clean, dry, sound, smooth, and free of dirt, debris, and other contamination before any materials are supplied.
- P. Any isolated areas that must be torn off and replaced will be built-up to the height of the existing roof prior to the installation of the new roofing membrane system.

1.16 QUALIFICATIONS

- A. Contractor or Contractor's staff if requirements are inherently limited to individuals rather than corporate entities, shall have the following minimum qualifications:
- B. The contractor's installer technicians must be factory trained, authorized to sell, and install what is specified that is being bid, with five (5) years' experience.
- C. At all times, the contractor shall ensure appropriately trained and qualified technicians to do the installation.

1.17 EXPERIENCE

- A. Contractor, or Contractor's supervisory staff assigned to this project, must have successfully completed at least five (5) projects that involved work similar to that described in these specifications or the Project Plans Manual. Compliance with this experience requirement will be determined prior to contract award by the State through references provided by the Contractor upon request, through knowledge or documentation of the Contractor's past projects, through confirmation of experience requirements from the firm assisting the State in this project, or some other method that the State determines to be acceptable. Contractor must provide any documentation requested by the State to assist in confirmation of compliance with this provision. References, documentation, or other information to confirm compliance with this experience requirement may be requested after bid opening and prior to contract award.

1.18 CERTIFICATIONS

- A. The Contractor shall ensure that all work performed under this Contract is performed by an appropriately licensed individual. Required licenses may include, but are not limited to the following:
 - 1. Electricians – West Virginia Electricians License
 - 2. Mechanical Contractor License
 - 3. Plumbing Contractor License

1.19 ROOF DECK

- A. The contractor shall notify the Owner or Owner's Representative of any unforeseen areas of wet insulation. Where the damage is serious and extensive, it will be the Owner's prerogative to authorize removal and replacement of deteriorated roofing, insulation and repair of the vapor barrier, if present. Where damage to the roof deck is found, the Contractor shall furnish the Owner with a unit price for removal and replacement of the damaged deck.

1.20 WORK HOURS AND DAYS

- A. When the Contract is awarded, the Contractor will contact the Owner's Representative to arrange the work schedule and the hours of the day that the workmen may be on the building. The job is to be bid under the assumption that all work will be performed on a straight time basis.
- B. The standard hours for this contract are listed below, excluding holidays recognized by the State of West Virginia. Any work outside of the standard hours of work must be approved in advance at the Agency's sole

discretion. Authorization of work outside of the standard hours of work will not entitle the Contractor to additional compensation.

- C. On-Site Work Hours: Limit work in the existing buildings to normal business working hours specified below:
- D. The standard hours of work for this Contract will be
- E. Monday thru Friday from 8:00 am until 6:00 pm.
- F. If the contractor wishes to work a different schedule other than what was previously stated, the DOH facility will work with the contractor. For example, the contractor works for four (4) days a week for a ten (10) hour shift each day.

1.21 OWNER'S RULES

- A. The Contractor and all his/her personnel/agent(s) shall abide by all rules created by the Owner. The Contractor must contact the Owner's Representative for specific information regarding the rules governing all operations of the project.
- B. The Contractor shall properly notify all employees of conditions relating to roof areas with very poor condition and which will be worked on. After such notification, the Contractor must take all necessary precautions to ensure the safety of his/her employees as well as the building personnel.

1.22 RESPONSIBILITY FOR MEASUREMENTS AND QUANTITIES

- A. The Bidding Contractors shall be solely responsible for all accuracy of all measurements and for estimating the material required to satisfy these specifications.

1.23 CLEAN-UP

- A. Accumulated debris shall be removed periodically to assure maximum safety and sanitation at all times. At completion of work, the Contractor shall remove all excess material and debris from the site and leave all roof surfaces free from accumulations of dirt, debris and other extraneous materials. The Contractor shall also remove any and all drippage of bituminous materials from the face of the buildings, floor, window, ladders and other finished surfaces.

1.24 SUPERINTENDENT

- A. The Contractor shall keep a competent superintendent, satisfactory to the Owner and Owner's Representative, on the job at all times when work is in progress. The superintendent shall not be changed without notifying the Owner and the Owner's Representative unless the superintendent ceases to be in the employ of the Contractor.

- B. The superintendent shall represent the Contractor and all directions and instructions given to the superintendent shall be as binding as if given directly to the Contractor.
- C. The superintendent shall be responsible for the conduct of all the Contractor's employees on the premises and shall promptly take necessary measures to correct any abuses called to attention by the Owner.

1.25 MATERIALS MANUFACTURER REPRESENTATIVE

- A. The materials Manufacturer issuing the final guarantee on this roofing project must furnish a full-time employee to serve as the Manufacturer Representative during the course of the project.
- B. The Manufacturer Representative cannot be associated with or work for any Distributor or Contractor, nor have any financial association with either.
- C. The Manufacturer Representative must reside and be based out of the State of West Virginia.
- D. The Manufacturer will provide in writing, upon request of the Owner, and signed by an officer of the Company, complete acceptance of the terms listed under section 3.11. The Manufacturer must also supply the name and the phone number of the officer that will be endorsing the document.
- E. The Manufacturer Representative will be required to examine the roofing work a minimum of three (3) days a week or every other working day. This requirement will not be waived until the completion of the project.
- F. The authorized Manufacturer Representative shall be responsible for the following:
 - 1. Rendering any inspection services the Owner may request.
 - 2. Keeping the Owner informed after each inspection as to the progress and quality of the work as observed.
 - 3. Calling to the attention of the contractor those matters observed are considered to be in violation of the contract requirements.
 - 4. Reporting to the Owner in writing any failure or refusal of the Contractor to correct unacceptable practices called to attention.
 - 5. Supervise the taking of test cuts and the restoration of such areas.
 - 6. Confirming after completion of the specified work and based on observations and tests, that no application procedures in conflict with the specifications have been observed, other than those that may have been previously reported. Final payment will not be released until the Owner has received this confirmation.
 - 7. The presence and activities of the Manufacturer Representative shall in no way relieve the Contractor of contractual obligations.
- G. Non-compliance with the terms of this specification and ensuing contract can result in either the cancellation of the contract, or complete replacement of the defective

areas at the Contractor's expense. In the event of cancellation, the Owner will not be obliged to compensate the Contractor for any work undertaken. Furthermore, damages caused by water infiltration resulting from the failure of the Contractor to secure each day's work in a watertight manner, will be corrected at the Contractor's expense. Included, as damages will be all labor costs incurred by the Owner as a result of such water infiltration.

1.26 APPROVED CONTRACTORS

- A. The roof systems must be applied only by those contractors who have received approval from the Material Manufacturer for such installations. No guarantees will be issued when installation has been performed by a non-approved contractor.

PART 2 — PRODUCTS (not used)

PART 3 — EXECUTION (not used)

END OF SECTION 00 72 00

SECTION 01 11 00
SUMMARY OF WORK

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, apply to this Section.

1.2 SUMMARY

- A. Section includes:
 - 1. Scope of Work
 - 2. Additional Requirements

1.3 PROJECT INFORMATION

- A. Project Information:
 - 1. West Virginia Division of Highways – District 8 HQ Roof Replacement
 - 2. Owner’s Representative:
 - a. Hunter Booth, West Virginia Department of Transportation, Buildings and Grounds – Section Head

1.4 SCOPE OF WORK

- A. Base Bid: District 8 HQ Roof Replacement
 - 1. Remove and discard existing shingles, edge metal, and flashings to expose the deck.
 - 2. Inspect the deck for deterioration/damage and perform any necessary repair at a cost per square foot unit basis.
 - 3. Raise plumbing stacks, utility lines, and equipment supports providing sufficient flashing height to meet manufacturer’s requirements and accommodate new roof system thickness.
 - 4. Remove all equipment marked for removal or not in use.
 - 5. Install a self-adhered ice/water shield directly to the wood decking throughout the entirety of the roof that is receiving standing seam metal.
 - 6. Install new Standing Seam metal roof system over the installed ice/water barrier according to the manufacturer’s recommendations.
 - a. Install new gutters and downspouts where existing systems are removed.
 - b. Install S-5! snow protection systems according to the manufacturer.
 - 7. The manufacturer's 35 year NDL warranty for the Standing Seam roof system will be provided upon completion.

1.5 ADDITIONAL REQUIREMENTS

- A. The contractor is responsible for acquiring all applicable permits.

- B. The contractor is responsible for adhering to all OSHA, state, federal, and local regulations.
- C. The contractor is responsible for installing pressure treated perimeter wood blocking, raising/moving utility/plumbing lines, and raising mechanical units to meet flashing requirements and account for increased insulation thicknesses.
- D. The contractor is responsible for moving all electrical conduit and security cameras as necessary to install the new roof system.
- E. The contractor is responsible for installing level, vertical wood sheathing on all interior parapet walls to meet wall panel flashing requirements.
- F. The contractor is responsible for ensuring positive slope to the roof drains and the elimination of ponding water.

PART 2 PART 2 – PRODUCTS (not used)

PART 3 PART 3 – EXECUTION (not used)

PART 4 END OF SECTION

SECTION 01 22 00

UNIT PRICES

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, apply to this Section.

1.2 SUMMARY

- A. The section includes administrative and procedural requirements for unit prices.
- B. Unit prices are to be included in the Lump Sum total base bid.
- C. Include allowances of 500 SF/LF for both the decking replacement and fascia board replacement in the Lump Sum total for the base bid.

1.3 PROCEDURES

- A. Unit prices include all necessary material, plus cost for delivery, installation, insurance, applicable taxes, overhead, and profit.
- B. Items that require the use of unit prices, which will adjust the contract amount, must be documented, and approved by the owner prior to Work.
- C. List of Unit Prices: A schedule of unit prices is included in Part 3.

PART 2 – PRODUCTS (not used)

PART 3 – EXECUTION

3.1 SCHEDULE OF UNIT PRICES

- A. Unit Price 1: Replacement of Wood Decking
 - 1. Description: Replacement of existing wood decking which is deteriorated.
 - 2. Unit of measurement: Square feet
- B. Unit Price 2: Replacement of Wood Fascia boards.
 - 1. Description: Replacement of wood fascia boards that are deteriorated beyond use.
 - 2. Unit of measurement: Linear foot

END OF SECTION 01 22 00

SECTION 01 25 00

SUBSTITUTION PROCEDURES

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. The section includes administrative and procedural requirements for substitutions.
- B. Related Requirements:
 - 1. Section 01 33 00 – Submittal Procedures
 - 2. Section 01 60 00 – Product Requirements

1.3 DEFINITIONS

- A. Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Contractor.
 - 1. Substitutions for Cause: Changes proposed by Contractor that are required due to changed Project conditions, such as unavailability of product, regulatory changes, or unavailability of required warranty terms.
 - 2. Substitutions for Convenience: Changes proposed by Contractor or Owner that are not required in order to meet other Project requirements but may offer advantage to Contractor or Owner.
 - 3. The following are not considered to be requests for substitutions:
 - a. Substitutions requested during the bidding period, and accepted by Addendum prior to award of the Contract, are included in the Contract Documents and are not subject to requirements specified in this Section for substitutions.
 - b. Revisions to the Contract Documents requested by the Owner or Architect.
 - c. Specified options of products and construction methods included in the Contract Documents.
 - d. The Contractor's determination of and compliance with governing regulations and orders issued by governing authorities.

1.4 ACTION SUBMITTALS

- A. Substitution Requests: Submit PDF electronic file or paper copies of each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
1. Substitution Request Form: Use facsimile of form provided in Project Manual as an attachment to the end of this Section.
 2. Documentation: Show compliance with requirements for substitutions and the following, as applicable:
 - a. Statement indicating why specified product or fabrication, or installation cannot be provided, if applicable.
 - b. Coordination information, including a list of changes or revisions needed to other parts of the Work and to construction performed by Owner and separate contractors, that will be necessary to accommodate proposed substitution.
 - c. Detailed comparison of significant qualities of proposed substitution with those of the Work specified. Include annotated copy of applicable Specification Section. Significant qualities may include attributes such as performance, weight, size, durability, visual effect, sustainable design characteristics, warranties, and specific features and requirements indicated. Indicate deviations, if any, from the Work specified.
 - d. Product Data, including drawings and descriptions of products and fabrication and installation procedures.
 - e. Samples, where applicable or requested.
 - f. Certificates and qualification data, where applicable or requested.
 - g. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners.
 - h. Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.
 - i. Research reports evidencing compliance with building code in effect for Project, from ICC-ES.
 - j. Detailed comparison of Contractor's construction schedule using proposed substitution with products specified for the Work, including effect on the overall Contract Time. If specified product or method of construction cannot be provided within the Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating date of receipt of purchase order, lack of availability, or delays in delivery.
 - k. Cost information, including a proposal of change, if any, in the Contract Sum.
 - l. Contractor's certification that proposed substitution complies with requirements in the Contract Documents except as indicated in the substitution request, is compatible with related materials, and is appropriate for applications indicated.

- m. Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.
- 3. Owner's Action: If necessary, the owner will request additional information or documentation for evaluation within seven (7) calendar days of receipt of a request for substitution. The owner will notify the Contractor of acceptance or rejection of proposed substitution within fifteen (15) calendar days of receipt of request, or seven (7) calendar days of receipt of additional information or documentation, whichever is later.
 - a. The Owner, after evaluation of the submitted documentation and advice, will decide whether to consider or reject a request for substitution.
 - b. The owner may require the Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any proposed substitution.
 - c. Owner will record time required in evaluating substitutions proposed by Contractor and in making changes in the Contract Documents occasioned thereby. Whether or not the owner accepts the proposed substitution, the owner shall request reimbursement from the contractor for the charges of Owner's time for evaluating each proposed substitution.
 - d. Forms of Acceptance: Change Order, Construction Change Directive, or Owner's Supplemental Instructions for minor changes in the Work.
 - e. Use product specified if the owner does not issue a decision on use of a proposed substitution within time allocated.

1.5 QUALITY ASSURANCE

- A. Compatibility of Substitutions: Investigate and document compatibility of proposed substitution with related products and materials. Engage a qualified testing agency to perform compatibility tests recommended by manufacturers.

1.6 PROCEDURES

- A. Coordination: Revise or adjust affected work as necessary to integrate work of the approved substitutions.

PART 2 – PRODUCTS

2.1 SUBSTITUTIONS

- A. Substitutions for Cause: Submit requests for substitution immediately on discovery of need for change, but not later than fifteen (15) calendar days prior to time required for preparation and review of related submittals.

1. Conditions: Owner will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Owner will return requests without action, except to record noncompliance with these requirements:
 - a. Requested substitution is consistent with the Contract Documents and will produce indicated results.
 - b. The substitution request is fully documented and properly submitted.
 - c. Requested substitution will not adversely affect Contractor's construction schedule.
 - d. Requested substitution has received necessary approvals of authorities having jurisdiction.
 - e. Requested substitution is compatible with other portions of the Work.
 - f. Requested substitution has been coordinated with other portions of the Work.
 - g. Requested substitution provides specified warranty.
 - h. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.
- B. Substitutions for Convenience: Not permitted.
- C. The Contractor's submittal and the Owner's acceptance of Shop Drawings, Product Data, or Samples for construction activities not complying with the Contract Documents do not constitute an acceptable or valid request for substitution, nor do they constitute approval of any substitution.

PART 3 – EXECUTION (Not Used)

END OF SECTION 01 25 00

SECTION 01 26 00

CONTRACT MODIFICATION PROCEDURES

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. The section includes administrative and procedural requirements for handling and processing Contract modifications.
- B. Related Requirements:
 - 1. Section 01 25 00 "Substitution Procedures" for administrative procedures for handling requests for substitutions made after the Contract award.

1.3 MINOR CHANGES IN THE WORK

- A. The owner will issue supplemental instructions authorizing minor changes in the Work, not involving adjustment to the Contract Sum or the Contract Time, on AIA Document G710, "Architect's Supplemental Instructions."

1.4 PROPOSAL REQUESTS

- A. Owner-Initiated Proposal Requests: Owner will issue a detailed description of proposed changes in the Work that may require adjustment to the Contract Sum or the Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.
 - 1. Work Change Proposal Requests issued by the owner are not instructions either to stop work in progress or to execute the proposed change.
 - 2. Within time specified in Proposal Request or ten (10) days, when not otherwise specified, after receipt of Proposal Request, submit a quotation estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.
 - a. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.

- b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
 - c. Include costs of labor and supervision directly attributable to the change.
 - d. Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
 - e. Quotation Form: Use forms acceptable to the owner.
- B. Contractor-Initiated Work Change Proposals: If latent or changed conditions require modifications to the Contract, Contractor may initiate a claim by submitting a request for a change to Owner.
- 1. Include a statement outlining reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and the Contract Time.
 - 2. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
 - 3. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
 - 4. Include costs of labor and supervision directly attributable to the change.
 - 5. Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
 - 6. Comply with requirements in Section 01 25 00 "Substitution Procedures" if the proposed change requires substitution of one product or system for product or system specified.
 - 7. Work Change Proposal Request Form: Use form acceptable to Owner.

1.5 ADMINISTRATIVE CHANGE ORDERS

- A. Unit-Price Adjustment: See Section 01 22 00 "Unit Prices" for administrative procedures for preparation of Change Order Proposal for adjusting the Contract Sum to reflect measured scope of unit-price work.

1.6 CHANGE ORDER PROCEDURES

- A. On Owner's approval of a Work Change Proposal Request, Owner will issue a Change Order for signatures of Owner and Contractor on AIA Document G701.

1.7 CONSTRUCTION CHANGE DIRECTIVE

- A. Construction Change Directive: Owner may issue a Construction Change Directive on AIA Document G714. Construction Change Directive instructs Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
 - 1. Construction Change Directive contains a complete description of change in the Work. It also designates methods to be followed to determine change in the Contract Sum or the Contract Time.

- B. Documentation: Maintain detailed records on a time and material basis of work required by the Construction Change Directive.
 - 1. After completion of change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

PART 2 – PRODUCTS (Not Used)

PART 3 – EXECUTION (Not Used)

END OF SECTION 01 26 00

SECTION 01 29 00

PAYMENT PROCEDURES

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. The section includes administrative and procedural requirements necessary to prepare and process Applications for Payment.

1.3 Related Requirements:

- A. Section 01 26 00 "Contract Modification Procedures" for administrative procedures for handling changes to the Contract.
- B. Section 01 32 00 "Construction Progress Documentation" for administrative requirements governing the preparation and submittal of the Contractor's construction schedule.

1.4 DEFINITIONS

- A. Schedule of Values: A statement furnished by Contractor allocating portions of the Contract Sum to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.

1.5 SCHEDULE OF VALUES

- A. Coordination: Coordinate preparation of the schedule of values with preparation of Contractor's construction schedule.
 - 1. Coordinate line items in the schedule of values with other required administrative forms and schedules, including the following:
 - a. Application for Payment forms with continuation sheets.
 - b. Submittal schedule.
 - c. Items required to be indicated as separate activities in Contractor's construction schedule.
 - 2. Submit the schedule of values to the Owner at earliest possible date, but no later than seven (7) days before the date scheduled for submission of initial Applications for Payment.
 - 3. Sub schedules for Phased Work: Where the Work is separated into phases requiring separately phased payments, provide sub schedules showing values coordinated with each phase of payment.
- B. Format and Content: Use Project Manual table of contents as a guide to establish line items for the schedule of values. Provide at least one line item for each Specification Section.

1. Identification: Include the following Project identification on the schedule of values:
 - a. Project name and location.
 - b. Name of Owner.
 - c. Owner's project number.
 - d. Contractor's name and address.
 - e. Date of submission.
2. Arrange schedule of values consistent with format of AIA Document G703.
3. Arrange the schedule of values in tabular form with separate columns to indicate the following for each item listed:
 - a. Related Specification Section or Division.
 - b. Description of the Work.
 - c. Name of subcontractor.
 - d. Name of manufacturer or fabricator.
 - e. Name of supplier.
 - f. Change Orders (numbers) that affect value.
 - g. Dollar value of the following, as a percentage of the Contract Sum to nearest one-hundredth percent, adjusted to total 100 percent.
 - 1) Labor.
 - 2) Materials.
 - 3) Equipment.
4. Provide a breakdown of the Contract Sum in enough detail to facilitate continued evaluation of Applications for Payment and progress reports. Coordinate with Project Manual table of contents. Provide multiple line items for principal subcontract amounts in excess of five (5) percent of the Contract Sum.
5. Round amounts to the nearest whole dollar; total shall equal the Contract Sum.
6. Provide a separate line item in the schedule of values for each part of the Work where Applications for Payment may include materials or equipment purchased or fabricated and stored, but not yet installed.
 - a. Differentiate between items stored on-site and items stored off-site. If required, include evidence of insurance.
7. Provide separate line items in the schedule of values for initial cost of materials, for each subsequent stage of completion, and for total installed value of that part of the Work.
8. Each item in the schedule of values and Applications for Payment shall be complete. Include total cost and proportionate share of general overhead and profit for each item.
 - a. Temporary facilities and other major cost items that are not direct cost of actual work-in-place may be shown either as separate line items in the schedule of values or distributed as general overhead expense, at Contractor's option.
9. Schedule Updating: Update and resubmit the schedule of values before the next Applications for Payment when Change Orders or Construction Change Directives result in a change in the Contract Sum.

1.6 APPLICATIONS FOR PAYMENT

- A. Each Application for Payment following the initial Application for Payment shall be consistent with previous applications and payments as certified by Owner and paid for by Owner.
 - 1. Initial Application for Payment, Application for Payment at time of Substantial Completion, and final Application for Payment involve additional requirements.
- B. Payment Application Times: Submit Application for Payment to Owner by the 25th of the month. The period covered by each Application for Payment is one month, ending on the last day of the month.
 - 1. Submit a draft copy of Application for Payment a minimum of three (3) days prior to the due date for review by the Owner.
- C. Application for Payment Forms: Use AIA Document G702 and AIA Document G703 as form for Applications for Payment.
- D. Application for Payment Forms: Use forms acceptable to Owner and Owner for Applications for Payment. Submit forms for approval with initial submittal of schedule of values.
- E. Application Preparation: Complete every entry on form. Notarize and execute by a person authorized to sign legal documents on behalf of the Contractor. The owner will return incomplete applications without action.
 - 1. Entries shall match data on the schedule of values and Contractor's construction schedule. Use updated schedules if revisions were made.
 - 2. Include amounts for work completed following the previous Application for Payment, whether or not payment has been received. Include only amounts for work completed at time of Application for Payment.
 - 3. Include amounts of Change Orders and Construction Change Directives issued before the last day of the construction period covered by application.
 - 4. Indicate separate amounts for work being carried out under Owner-requested project acceleration.
- F. Stored Materials: Included in Application for Payment amounts applied for materials or equipment purchased or fabricated and stored, but not yet installed. Differentiate between items stored on-site and items stored off-site.
 - 1. Provide certificate of insurance, evidence of transfer of title to Owner, and consent of surety to payment, for stored materials.
 - 2. Provide supporting documentation that verifies the amount requested, such as paid invoices. Match amount requested with amounts indicated on documentation; do not include overhead and profit on stored materials.
 - 3. Provide summary documentation for stored materials indicating the following:
 - a. Value of materials previously stored and remaining stored as of date of previous Applications for Payment.
 - b. Value of previously stored materials put in place after the date of previous Application for Payment and on or before date of current Application for Payment.

- c. Value of materials stored since date of previous Application for Payment and remaining stored as of date of current Application for Payment.
- G. Transmittal: Submit three (3) signed and notarized original copies of each Application for Payment to Owner by a method ensuring receipt within 24 hours. One copy shall include waivers of lien and similar attachments if required.
 - 1. Transmit each copy with a transmittal form listing attachments and recording appropriate information about application.
- H. Waivers of Mechanic's Lien: With each Application for Payment, submit waivers of mechanic's lien from entities lawfully entitled to file a mechanic's lien arising out of the Contract and related to the Work covered by the payment.
 - 1. Submit partial waivers on each item for the amount requested in previous application, after deduction for retainage, on each item.
 - 2. When an application shows completion of an item, submit conditional final or full waivers.
 - 3. The owner reserves the right to designate which entities involved in the Work must submit waivers.
 - 4. Waiver Forms: Submit executed waivers of lien on forms acceptable to the owner.
- I. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following:
 - 1. List of subcontractors.
 - 2. Schedule of values.
 - 3. Contractor's construction schedule (preliminary if not final).
 - 4. Products list (preliminary if not final).
 - 5. Submittal schedule (preliminary if not final).
 - 6. List of Contractor's staff assignments.
 - 7. List of Contractor's principal consultants.
 - 8. Copies of building permits.
 - 9. Copies of authorizations and licenses from authorities having jurisdiction for performance of the Work.
 - 10. Initial progress report.
 - 11. Report of preconstruction conference.
 - 12. Certificates of insurance and insurance policies.
 - 13. Performance and payment bonds.
 - 14. Data needed to acquire Owner's insurance.
- J. Application for Payment at Substantial Completion: After the owner issues the Certificate of Substantial Completion, submit an Application for Payment showing 100 percent completion for the portion of the Work claimed as substantially complete.
 - 1. Include documentation supporting the claim that the Work is substantially complete and a statement showing an accounting of changes to the Contract Sum.

2. This application shall reflect Certificate(s) of Substantial Completion issued previously for Owner occupancy of designated portions of the Work.

K. Final Payment Application: After completing Project closeout requirements, submit final Application for Payment with releases and supporting documentation not previously submitted and accepted, including, but not limited, to the following:

1. Evidence of completion of Project closeout requirements.
2. Insurance certificates for products and completed operations where required and proof that taxes, fees, and similar obligations were paid.
3. Updated final statement, accounting for final changes to the Contract Sum.
4. AIA Document G706-1994, "Contractor's Affidavit of Payment of Debts and Claims."
5. AIA Document G706A-1994, "Contractor's Affidavit of Release of Liens."
6. AIA Document G707-1994, "Consent of Surety to Final Payment."
7. Evidence that claims have been settled.
8. Final meter readings for utilities, a measured record of stored fuel, and similar data as of date of Substantial Completion or when Owner took possession of and assumed responsibility for corresponding elements of the Work.
9. Final liquidated damages settlement statement.

PART 2 – PRODUCTS (Not Used)

PART 3 – EXECUTION (Not Used)

END OF SECTION 01 29 00

SECTION 01 31 00

PROJECT MANAGEMENT AND COORDINATION

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:
 - 1. General coordination procedures.
 - 2. Requests for Interpretation (RFIs).
 - 3. Project meetings.
- B. Related Requirements:
 - 1. Section 01 32 00 "Construction Progress Documentation" for preparing and submitting Contractor's construction schedule.
 - 2. Section 01 77 00 "Closeout Procedures" for coordinating closeout of the Contract.

1.3 DEFINITIONS

- A. RFI: Request, initiated either by the Owner or the Contractor, asking for interpretation of an item in the Contract Documents.

1.4 INFORMATIONAL SUBMITTALS

- A. Subcontract List: Prepare a written summary identifying individuals or firms proposed for each portion of the Work, including those who are to furnish products or equipment fabricated to a special design. Include the following information in tabular form:
 - 1. Name, address, and telephone number of entities performing subcontract or supplying products.
 - 2. Number and title of related Specification Section(s) covered by subcontract.
 - 3. Drawing number and detail references, as appropriate, covered by subcontract.

- B. Key Personnel Names: Within fifteen (15) days of starting construction operations, submit a list of key personnel assignments, including superintendent and other personnel in attendance at Project site. Identify individuals and their duties and responsibilities, list addresses, office and cellular telephone numbers, and e-mail addresses. Provide names, addresses, and telephone numbers of individuals assigned as alternates in the absence of individuals assigned to Project.
 - 1. Post copies of the list in the project meeting room, in a temporary field office. Keep a list current at all times.

1.5 GENERAL COORDINATION PROCEDURES

- A. Coordination: Coordinate construction operations included in different Sections of the Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations, included in different Sections that depend on each other for proper installation, connection, and operation.
 - 1. Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
 - 2. Coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair.
 - 3. Make adequate provisions to accommodate items scheduled for later installation.
 - 4. Where availability of space is limited, coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair of all components, including mechanical and electrical.
- B. Prepare memorandum for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and list of attendees at meetings.
 - 1. Prepare similar memoranda for the owner and separate contractors if coordination of their work is required.
- C. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:
 - 1. Preparation of Contractor's construction schedule.
 - 2. Preparation of the schedule of values.
 - 3. Installation and removal of temporary facilities and controls.
 - 4. Delivery and processing of submittals.
 - 5. Progress meetings.
 - 6. Preinstallation conferences.

7. Project closeout activities.
 8. Startup and adjustment of systems.
- D. Conservation: Coordinate construction activities to ensure that operations are carried out with consideration given to conservation of energy, water, and materials. Coordinate use of temporary utilities to minimize waste.

1.6 REQUESTS FOR INTERPRETATION (RFIs)

- A. General: Immediately on discovery of the need for additional information or interpretation of the Contract Documents, Contractor shall prepare and submit an RFI in the form specified.
1. The owner will return RFIs submitted to the owner by other entities controlled by Contractor with no response.
 2. Coordinate and submit RFIs in a prompt manner so as to avoid delays in Contractor's work or work of subcontractors.
- B. Frivolous RFIs: A frivolous RFI is an RFI for which the answer is simply a reference to the Drawings or Specifications with no additional input required to clarify or answer the question.
- C. Content of the RFI: Include a detailed, legible description of item needing information or interpretation and the following:
1. Project name.
 2. Project number.
 3. Date.
 4. Name of Contractor.
 5. Name of Owner.
 6. RFI number, numbered sequentially.
 7. RFI subject.
 8. Specification Section number and title and related paragraphs, as appropriate.
 9. Drawing number and detail references, as appropriate.
 10. Field dimensions and conditions, as appropriate.
 11. Contractor's suggested resolution. If Contractor's suggested resolution impacts the Contract Time or the Contract Sum, Contractor shall state impact in the RFI.
 12. Contractor's signature certifying that the request has been researched in the Drawings and Specifications, and is not answered by the Contract Documents.
 13. Attachments: Include sketches, descriptions, measurements, photos, Product Data, Shop Drawings, coordination drawings, and other information necessary to fully describe items needing interpretation.
 - a. Include dimensions, thicknesses, structural grid references, and details of affected materials, assemblies, and attachments on attached sketches.

- D. RFI Forms: Software-generated form with substantially the same content as indicated above, acceptable to the owner.
1. Attachments shall be electronic files in Adobe Acrobat PDF format.
- E. Owner's Action: Owner will review each RFI, determine action required, and respond. The Owner will respond to RFI's within an average of seven (7) days. It is acknowledged and understood that some RFI's will take longer to respond to than others depending on the complexity of the specific issue. RFIs received by the owner after 1:00 p.m. will be considered as received the following working day.
1. The following Contractor-generated RFIs will be returned without action:
 - a. Requests for approval of submittals.
 - b. Requests for approval of substitutions.
 - c. Requests for approval of Contractor's means and methods.
 - d. Requests for coordination information already indicated in the Contract Documents.
 - e. Requests for adjustments in the Contract Time or the Contract Sum.
 - f. Requests for interpretation of Owner's actions on submittals.
 - g. Incomplete RFIs or inaccurately prepared RFIs.
 - h. RFIs deemed by the Owner to be frivolous.
 2. Owner's action may include a request for additional information, in which case Owner's time for response will date from time of receipt of additional information.
 3. Owner's action on RFIs that may result in a change to the Contract Time or the Contract Sum may be eligible for Contractor to submit Change Proposal according to Section 01 26 00 "Contract Modification Procedures."
 - a. If the Contractor believes the RFI response warrants change in the Contract Time or the Contract Sum, notify the Owner in writing within Ten (10) days of receipt of the RFI response.
- F. RFI Log: Prepare, maintain, and submit a tabular log of RFIs organized by the RFI number. Submit log monthly. Include the following:
1. Project name.
 2. Name and address of Contractor.
 3. Name and address of Owner.
 4. RFI number including RFIs that were returned without action or withdrawn.
 5. RFI description.
 6. Date the RFI was submitted.
 7. Date Owner's response was received.

- G. On receipt of the Owner's action, update the RFI log and immediately distribute the RFI response to affected parties. Review response and notify Owner within seven (7) days if Contractor disagrees with response.
 - 1. Identification of related Minor Change in the Work, Construction Change Directive, and Proposal Request, as appropriate.

1.7 PROJECT MEETINGS

- A. General: Schedule and conduct meetings and conferences at Project site unless otherwise indicated.
 - 1. Attendees: Inform participants and others involved, and individuals whose presence is required, of date and time of each meeting. Notify Owner and Owner of scheduled meeting dates and times.
 - 2. Agenda: Prepare the meeting agenda. Distribute the agenda to all invited attendees.
 - 3. Minutes: Entity responsible for conducting meetings will record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, including Owner, within three (3) days of the meeting

- B. Preconstruction Conference: Schedule and conduct a pre construction conference before starting construction, at a time convenient to the owner and project manager, but no less than fifteen (15) days prior to anticipated construction start date.
 - 1. Attendees: Owner and/or Owner's representatives; Manufacturer's representatives and field quality inspector; Contractor and its superintendent; major subcontractors; warranting manufacturers; and other concerned parties shall attend the conference. Participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
 - 2. Agenda: Discuss items of significance that could affect progress, including the following:
 - a. Tentative construction schedule.
 - b. Phasing.
 - c. Critical work sequencing and long-lead items.
 - d. Designation of key personnel and their duties.
 - e. Lines of communications.
 - f. Procedures for processing field decisions and Change Orders.
 - g. Procedures for RFIs.
 - h. Procedures for testing and inspecting.
 - i. Procedures for processing Applications for Payment.
 - j. Distribution of the Contract Documents.
 - k. Submittal procedures.
 - l. Preparation of record documents.
 - m. Use of the premises and existing building.
 - n. Work restrictions.

- o. Working hours.
 - p. Owner's occupancy requirements.
 - q. Responsibility for temporary facilities and controls.
 - r. Procedures for moisture and mold control.
 - s. Procedures for disruptions and shutdowns.
 - t. Construction waste management and recycling.
 - u. Parking availability.
 - v. Office, work, and storage areas.
 - w. Equipment deliveries and priorities.
 - x. First aid.
 - y. Security.
 - z. Progress cleaning.
3. Minutes: Entity responsible for conducting meetings will record and distribute meeting minutes.
- C. Progress Meetings: Conduct progress meetings at monthly intervals as determined by the Owner and project manager.
- 1. Attendees: Owner and/or Owner's representatives; Manufacturer's representatives and/or field quality inspector; Contractor and its superintendent; major subcontractors; warranting manufacturers; and other concerned parties shall attend the conference. Participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
 - 2. Agenda: Review and correct or approve minutes of previous progress meetings. Review other items of significance that could affect progress. Include topics for discussion as appropriate to the status of Project.
 - a. Contractor's Construction Schedule: Review progress since the last meeting. Determine whether each activity is on time, ahead of schedule, or behind schedule, in relation to the Contractor's construction schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.
 - 1) Review schedule for next period.
 - b. Review present and future needs of each entity present, including the following:
 - 1) Interface requirements.
 - 2) Sequence of operations.
 - 3) Status of submittals.
 - 4) Deliveries.
 - 5) Off-site fabrication.
 - 6) Access.
 - 7) Site utilization.

- 8) Temporary facilities and controls.
 - 9) Progress cleaning.
 - 10) Quality and work standards.
 - 11) Status of correction of deficient items.
 - 12) Field observations.
 - 13) Site safety.
 - 14) Status of RFIs.
 - 15) Status of proposal requests.
 - 16) Pending changes.
 - 17) Status of Change Orders.
 - 18) Pending claims and disputes.
 - 19) Documentation of information for payment requests.
3. Minutes: Entity responsible for conducting the meeting will record and distribute the meeting minutes to each party present and to parties requiring information.
- a. Schedule Updating: Revise Contractor's construction schedule after each progress meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with the report of each meeting.
- D. Project Closeout Conference: Schedule and conduct a project closeout conference, at a time convenient to the owner and project manager, but no later than ten (10) days prior to the scheduled date of Substantial Completion.
1. Conduct the conference to review requirements and responsibilities related to Project closeout.
 2. Attendees: Authorized representatives of Owner, project manager, and their consultants; Contractor and its superintendent; major subcontractors; warranting manufacturers; and other concerned parties shall attend the meeting. Participants at the meeting shall be familiar with Project and authorized to conclude matters relating to the Work.
 3. Agenda: Discuss items of significance that could affect or delay Project closeout, including the following:
 - a. Preparation of record documents.
 - b. Procedures required prior to inspection for Substantial Completion and for final inspection for acceptance.
 - c. Submittal of written warranties.
 - d. Requirements for preparing operations and maintenance data.
 - e. Requirements for delivery of material samples, attic stock, and spare parts.
 - f. Requirements for demonstration and training.
 - g. Preparation of Contractor's punch list.

- h. Procedures for processing Applications for Payment at Substantial Completion and for final payment.
 - i. Submittal procedures.
 - j. Owner's partial occupancy requirements.
 - k. Installation of Owner's furniture, fixtures, and equipment.
 - l. Responsibility for removing temporary facilities and controls.
4. Minutes: Entity conducting meetings will record and distribute meeting minutes.

PART 2 – PRODUCTS (Not Used)

PART 3 – EXECUTION (Not Used)

END OF SECTION 01 31 00

SECTION 01 32 00

CONSTRUCTION PROGRESS DOCUMENTATION

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for documenting the progress of construction during performance of the Work, including the following:
 - 1. Startup construction schedule.
 - 2. Contractor's construction schedule.
 - 3. Construction schedule updating reports.
 - 4. Daily construction reports.
 - 5. Material location reports.
 - 6. Site condition reports.
 - 7. Special reports.
- B. Related Requirements:
 - 1. Section 01 33 00 "Submittal Procedures" for submitting schedules and reports.
 - 2. Section 01 40 00 "Quality Requirements" for submitting a schedule of tests and inspections.

1.3 DEFINITIONS

- A. Activity: A discrete part of a project that can be identified for planning, scheduling, monitoring, and controlling the construction project. Activities included in a construction schedule consume time and resources.
 - 1. Critical Activity: An activity on the critical path that must start and finish on the planned early start and finish times.
 - 2. Predecessor Activity: An activity that precedes another activity in the network.
 - 3. Successor Activity: An activity that follows another activity in the network.

1.4 INFORMATIONAL SUBMITTALS

- A. Format for Submittals: Submit required submittals in one of the following formats:

1. PDF electronic file.
 2. Two (2) paper copies.
- B. Startup construction schedule.
- C. Startup Network Diagram: Of size required to display the entire network for the entire construction period. Show logic ties for activities.
- D. Contractor's Construction Schedule: Initial schedule, of size required to display the entire schedule for the entire construction period.
- E. Construction Schedule Updating Reports: Submit with Applications for Payment.
- F. Daily Construction Reports: Submit at weekly intervals.
- G. Material Location Reports: Submit at weekly intervals.
- H. Site Condition Reports: Submit at time of discovery of differing conditions.
- I. Special Reports: Submit at time of unusual event.

1.5 COORDINATION

- A. Coordinate preparation and processing of schedules and reports with performance of construction activities and with scheduling and reporting of separate contractors.
- B. Coordinate Contractor's construction schedule with the schedule of values, submittal schedule, progress reports, payment requests, and other required schedules and reports.
1. Secure time commitments for performing critical elements of the Work from entities involved.
 2. Coordinate each construction activity in the network with other activities and schedule them in proper sequence.

PART 2 – PRODUCTS

2.1 CONTRACTOR'S CONSTRUCTION SCHEDULE, GENERAL

- A. Time Frame: Extend schedule from date established for the Notice of Award to date of final completion.
1. Contract completion date shall not be changed by submission of a schedule that shows an early completion date, unless specifically authorized by Change Order.

- B. Activities: Treat each story or separate area as a separate numbered activity for each main element of the Work. Comply with the following:
1. Activity Duration: Define activities so no activity is longer than twenty (20) days, unless specifically allowed by the owner.
 2. Procurement Activities: Include procurement process activities for the following long lead items and major items, requiring a cycle of more than 60 days, as separate activities in schedule. Procurement cycle activities include, but are not limited to, submittals, approvals, purchasing, fabrication, and delivery.
 3. Submittal Review Time: Include review and resubmittal times indicated in Section 01 33 00 "Submittal Procedures" in schedule. Coordinate submittal review times in Contractor's construction schedule with submittal schedule.
 4. Startup and Testing Time: Include no fewer than fifteen (15) days for startup and testing.
 5. Substantial Completion: Indicate completion in advance of date established for Substantial Completion, and allow time for Owner's administrative procedures necessary for certification of Substantial Completion.
 6. Punch List and Final Completion: Include not more than thirty (30) days for completion of punch list items and final completion.
- C. Constraints: Include constraints and work restrictions indicated in the Contract Documents and as follows in schedule, and show how the sequence of the Work is affected.
1. Phasing: Arrange list of activities on schedule by phase.
 2. Owner-Furnished Products & Products furnished via other contractors: Include a separate activity for each product. Include delivery date indicated in Section 01 10 00 "Summary." Delivery dates indicated stipulate the earliest possible delivery date.
 3. Work Restrictions: Show the effect of the following items on the schedule:
 - a. Coordination with existing construction.
 - b. Limitations of continued occupancies.
 - c. Uninterruptible services.
 - d. Partial occupancy before Substantial Completion.
 - e. Use of premises restrictions.
 - f. Provisions for future construction.
 - g. Seasonal variations.
 - h. Environmental control.
- D. Milestones: Include milestones indicated in the Contract Documents in schedule, including, but not limited to, the Notice to Proceed, Substantial Completion, and final completion.

- E. Upcoming Work Summary: Prepare summary report indicating activities scheduled to occur or commence prior to submission of next schedule update. Summarize the following issues:
 - 1. Unresolved issues.
 - 2. Unanswered Requests for Interpretation.
 - 3. Rejected or unreturned submittals.
 - 4. Notations on returned submittals.
 - 5. Pending modifications affecting the Work and Contract Time.

- F. Recovery Schedule: When periodic update indicates the Work is fourteen (14) or more calendar days behind the current approved schedule, submit a separate recovery schedule indicating means by which Contractor intends to regain compliance with the schedule. Indicate changes to working hours, working days, crew sizes, and equipment required to achieve compliance, and date by which recovery will be accomplished.

- G. Computer Scheduling Software: Prepare schedules using the current version of a program that has been developed specifically to manage construction schedules.

2.2 CONTRACTOR'S CONSTRUCTION SCHEDULE (GANTT CHART)

- A. Gantt-Chart Schedule: Submit a comprehensive, fully developed, horizontal, Gantt-chart-type, Contractor's construction schedule within thirty (30) days of date established for the Notice of Award. Base schedule on the startup construction schedule and additional information received since the start of Project.

- B. Preparation: Indicate each significant construction activity separately. Identify the first workday of each week with a continuous vertical line.
 - 1. For construction activities that require three months or longer to complete, indicate an estimated completion percentage in ten (10) percent increments within time bar.

2.3 REPORTS

- A. Daily Construction Reports: Prepare a daily construction report recording the following information concerning events at Project site:
 - 1. List of subcontractors at Project site.
 - 2. List of separate contractors at Project site.
 - 3. Approximate count of personnel at Project site.
 - 4. Equipment at Project site.
 - 5. Material deliveries.

6. High and low temperatures and general weather conditions, including presence of rain or snow.
 7. Accidents.
 8. Meetings and significant decisions.
 9. Unusual events.
 10. Stoppages, delays, shortages, and losses.
 11. Meter readings and similar recordings.
 12. Emergency procedures.
 13. Orders and requests of authorities having jurisdiction.
 14. Change Orders received and implemented.
 15. Construction Change Directives received and implemented.
 16. Services connected and disconnected.
 17. Equipment or system tests and startups.
 18. Partial completions and occupancies.
 19. Substantial Completions authorized.
- B. Material Location Reports: At weekly intervals, prepare and submit a comprehensive list of materials delivered to and stored at Project site. List shall be cumulative, showing materials previously reported plus items recently delivered. Include with a list a statement of progress on and delivery dates for materials or items of equipment fabricated or stored away from the Project site. Indicate the following categories for stored materials:
1. Material stored prior to previous report and remaining in storage.
 2. Material stored prior to previous report and since removed from storage and installed.
 3. Material stored following previous report and remaining in storage.
- C. Site Condition Reports: Immediately on discovery of a difference between site conditions and the Contract Documents, prepare and submit a detailed report. Submit with a Request for Information. Include a detailed description of the differing conditions, together with recommendations for changing the Contract Documents.

PART 3 – EXECUTION

3.1 CONTRACTOR'S CONSTRUCTION SCHEDULE

- A. Contractor's Construction Schedule Updating: At monthly intervals, update schedule to reflect actual construction progress and activities. Issue schedule one (1) week before each regularly scheduled progress meeting.
1. Revise schedule immediately after each meeting or other activity where revisions have been recognized or made. Issue updated schedule concurrently with the report of each such meeting.

2. Include a report with updated schedule that indicates every change, including, but not limited to, changes in logic, durations, actual starts and finishes, and activity durations.
 3. As the Work progresses, indicate the final completion percentage for each activity.
- B. Distribution: Distribute copies of approved schedule to Owner, Owner, separate contractors, testing and inspecting agencies, and other parties identified by Contractor with a need-to-know schedule responsibility.
1. Post copies in Project meeting rooms and temporary field offices.
 2. When revisions are made, distribute updated schedules to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in performance of construction activities.

END OF SECTION 01 32 00

SECTION 01 32 33

PHOTOGRAPHIC DOCUMENTATION

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for the following:
 - 1. Preconstruction photographs.
 - 2. Periodic construction photographs.
 - 3. Final completion construction photographs.
- B. Related Requirements:
 - 1. Section 01 33 00 "Submittal Procedures" for submitting photographic documentation.
 - 2. Section 01 77 00 "Closeout Procedures" for submitting photographic documentation as Project Record Documents at Project closeout.
 - 3. Section 02 41 19 "Selective Demolition" for photographic documentation before selective demolition operations commence.

1.3 INFORMATIONAL SUBMITTALS

- A. Key Plan: Submit key plan of Project site and building with notation of vantage points marked for location and direction of each photograph. Indicate elevation or story of construction. Include the same information as corresponding photographic documentation.
- B. Digital Photographs: Submit unaltered, original, full-size image files within three (3) days of taking photographs.
 - 1. Digital Camera: Minimum sensor resolution of eight (8) megapixels.
 - 2. Format: Minimum 3200 by 2400 pixels, in unaltered original files, with same aspect ratio as the sensor, uncropped, date and time stamped, in folder named by date of photograph, accompanied by key plan file.
 - 3. Identification: Provide the following information with each image description in file metadata tag:
 - a. Name of Project.

- b. Name and contact information for photographer.
- c. Name of Owner's Representative.
- d. Name of Contractor.
- e. The date photograph was taken.
- f. Description of vantage point, indicating location, direction (by compass point), and elevation or story of construction.
- g. Unique sequential identifier keyed to accompanying key plan.

1.4 CLOSEOUT SUBMITTALS

- A. Submit a CD,DVD, or Digital Folder containing all of the digital photographs taken of the Work of this Project.

PART 2 – PRODUCTS

2.1 PHOTOGRAPHIC MEDIA

- A. Digital Images: Provide images in JPG format, produced by a digital camera with minimum sensor size of eight (8) megapixels, and at an image resolution of not less than 3200 by 2400 pixels.

PART 3 – EXECUTION

3.1 CONSTRUCTION PHOTOGRAPHS

- A. General: Take photographs using the maximum range of depth of field, and that are in focus, to clearly show the Work. Photographs with blurry or out-of-focus areas will not be accepted.
 - 1. Maintain a key plan with each set of construction photographs that identifies each photographic location.
- B. Digital Images: Submit digital images exactly as originally recorded in the digital camera, without alteration, manipulation, editing, or modifications using image-editing software.
 - 1. Date and Time: Include date and time in file name for each image.
 - 2. Field Office Images: Maintain one set of images accessible in the field office at Project site, available at all times for reference. Identify images in the same manner as those submitted to the Owner's Representative.
- C. Preconstruction Photographs: Before starting construction, take photographs of Project site and surrounding properties, including existing items to remain during construction, from different vantage points, as directed by the Owner's Representative.

- D. Periodic Construction Photographs: Take no less than twenty (20) photographs monthly, showing full scope of ongoing work.
 - 1. Each photograph date stamped.
 - 2. Each photograph identified with an accurate description of the work depicted.
 - 3. Each photograph identified the actual location of the picture relative to the Drawings.

- E. Final Completion Construction Photographs: Take twenty (20) color photographs after the date of Substantial Completion for submission as project record documents.

- F. Project Closeout: Provide a record copy of all construction digital photographs on disc.

END OF SECTION 01 32 33

SECTION 01 33 00

SUBMITTAL PROCEDURES

PART 1 – GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Submittal schedule requirements.
 - 2. Administrative and procedural requirements for submittals.

1.2 DEFINITIONS

- A. Action Submittals: Written and graphic information and physical samples that require Owner's responsive action. Action submittals are those submittals indicated in individual Specification Sections as "action submittals."
- B. Informational Submittals: Written and graphic information and physical samples that do not require Owner's responsive action. Submittals may be rejected for not complying with requirements. Informational submittals are those submittals indicated in individual Specification Sections as "informational submittals."

1.3 SUBMITTAL SCHEDULE

- A. Submittal Schedule: Submit, as an action submittal, a list of submittals, arranged in chronological order by dates required by construction schedule. Include time required for review, ordering, manufacturing, fabrication, and delivery when establishing dates. Include additional time required for making corrections or revisions to submittals noted by Owner and additional time for handling and reviewing submittals required by those corrections.

1.4 SUBMITTAL FORMATS

- A. Submittal Information: Include the following information in each submittal:
 - 1. Project name.
 - 2. Date.
 - 3. Name of Owner.
 - 4. Name of Contractor.
 - 5. Name of firm or entity that prepared the submission.
 - 6. Names of subcontractor, manufacturer, and supplier.
 - 7. Category and type of submittal.
 - 8. Submittal purpose and description.

9. Number and title of Specification Section, with paragraph number and generic name for each of multiple items.
 10. Drawing number and detail references, as appropriate.
 11. Indication of full or partial submission.
 12. Location(s) where product is to be installed, as appropriate.
 13. Other necessary identification.
 14. Remarks.
 15. Signature of transmitter.
- B. Options: Identify options requiring selection by the owner.
- C. Deviations and Additional Information: On each submittal, clearly indicate deviations from requirements in the Contract Documents, including minor variations and limitations; include relevant additional information and revisions, other than those requested by Owner on previous submittals. Indicate by highlighting on each submittal or noting on attached separate sheets.
- D. Electronic Submittals: Prepare submittals as PDF packages, incorporating complete information into each PDF file. Name PDF file with submittal number.

1.5 SUBMITTAL PROCEDURES

- A. Prepare and submit submittals required by individual Specification Sections. Types of submittals are indicated in individual Specification Sections.
1. Email: Prepare submittals as PDF package and transmit to Owner by sending via email. Include PDF transmittal form. Include information in the email subject line as requested by the owner.
- B. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.
1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
 2. Submit all submittal items required for each Specification Section concurrently unless partial submittals for portions of the Work are indicated on approved submittal schedule.
 3. Submit action submittals and informational submittals required by the same Specification Section as separate packages under separate transmittals.
- C. Processing Time: Allow time for submittal review, including time for resubmittals, as follows. Time for review shall commence on the Owner's receipt of submission. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.

1. Initial Review: Allow 15 days for initial review of each submission. Allow additional time if coordination with subsequent submittals is required. Owner will advise the Contractor when a submittal being processed must be delayed for coordination.
 2. Resubmittal Review: Allow 15 days for review of each resubmittal.
- D. Resubmittals: Make resubmittals in the same form and number of copies as the initial submittal.
- E. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.
- F. Use for Construction: Retain complete copies of submittals on Project site. Use only final action submittals that are marked with approval notation from Owner's action stamp.

1.6 SUBMITTAL REQUIREMENTS

- A. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.
1. If information must be specially prepared for submission because standard published data are unsuitable for use, submit as Shop Drawings, not as Product Data.
 2. Mark each copy of each submittal to show which products and options are applicable.
 3. Include the following information, as applicable:
 - a. Manufacturer's catalog cuts.
 - b. Manufacturer's product specifications.
 - c. Standard color charts.
 - d. Statement of compliance with specified referenced standards.
 - e. Testing by a recognized testing agency.
 - f. Application of testing agency labels and seals.
 - g. Notation of coordination requirements.
 - h. Availability and delivery time information.
 4. For equipment, include the following in addition to the above, as applicable:
 - a. Wiring diagrams that show factory-installed wiring.
 - b. Printed performance curves.
 - c. Operational range diagrams.
 - d. Clearances required to other construction, if not indicated on accompanying Shop Drawings.
 5. Submit Product Data before Shop Drawings, and before or concurrent with Samples.

- B. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data.
1. Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:
 - a. Identification of products.
 - b. Schedules.
 - c. Compliance with specified standards.
 - d. Notation of coordination requirements.
 - e. Notation of dimensions established by field measurement.
 - f. Relationship and attachment to adjoining construction clearly indicated.
 - g. Seal and signature of professional engineer if specified.
- C. Samples: Submit Samples for review of kind, color, pattern, and texture for a check of these characteristics with other materials.
1. Transmit Samples that contain multiple, related components such as accessories together in one submittal package.
 2. Identification: Permanently attach label on unexposed side of Samples that includes the following:
 - a. Project name and submittal number.
 - b. Generic description of Sample.
 - c. Product name and name of manufacturer.
 - d. Sample source.
 - e. Number and title of applicable Specification Section.
 - f. Specification paragraph number and generic name of each item.
 3. Email Transmittal: Provide PDF transmittal. Include digital image file illustrating Sample characteristics, and identification information for record.
 - a. Samples that may be incorporated into the Work are indicated in individual Specification Sections. Such Samples must be in an undamaged condition at time of use.
- D. Product Schedule: As required in individual Specification Sections, prepare a written summary indicating types of products required for the Work and their intended location. Include the following information in tabular form:
- E. Qualification Data: Prepare written information that demonstrates capabilities and experience of a firm or person. Include lists of completed projects with project names and addresses, contact information of Owners and owners, and other information specified.
- F. Design Data: Prepare and submit written and graphic information indicating compliance with indicated performance and design criteria in individual Specification Sections. Include list of assumptions and summary of loads. Include

load diagrams if applicable. Provide name and version of software, if any, used for calculations. Number each page of the submission.

G. Certificates:

1. Certificates and Certifications Submittals: Submit a statement that includes the signature of the entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity. Provide a notarized signature where indicated.
2. Installer Certificates: Submit written statements on manufacturer's letterhead certifying that Installer complies with requirements in the Contract Documents and, where required, is authorized by manufacturer for this specific Project.
3. Manufacturer Certificates: Submit written statements on manufacturer's letterhead certifying that manufacturer complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.
4. Material Certificates: Submit written statements on manufacturer's letterhead certifying that material complies with requirements in the Contract Documents.
5. Product Certificates: Submit written statements on manufacturer's letterhead certifying that product complies with requirements in the Contract Documents.

1.7 DELEGATED-DESIGN SERVICES

- A. Performance and Design Criteria: Where professional design services or certifications by a design professional are specifically required of Contractor by the Contract Documents, provide products and systems complying with specific performance and design criteria indicated.
1. If criteria indicated are insufficient to perform services or certification required, submit a written request for additional information to the owner.

1.8 CONTRACTOR'S REVIEW

- A. Action Submittals and Informational Submittals: Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with an approval stamp before submitting to the owner.
- B. Contractor's Approval: Indicate Contractor's approval for each submittal with a uniform approval stamp Include name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.
1. The owner will not review the submittals received from the Contractor that do not have Contractor's review and approval.

1.9 OWNER'S REVIEW

- A. Action Submittals: Owner will review each submittal, indicate corrections or revisions required.
 - 1. PDF Submittals: Owner will indicate, via markup on each submittal, the appropriate action.
- B. Informational Submittals: Owner will review each submittal and will not return it or will return it if it does not comply with requirements. The owner will forward each submission to the appropriate party.
- C. Partial submittals prepared for a portion of the Work will be reviewed when use of partial submittals has received prior approval from the Owner.
- D. Incomplete submittals are unacceptable, will be considered non responsive, and will be returned for resubmittal without review.
- E. The owner will return without reviewing the submittals received from sources other than Contractor.
- F. Submittals not required by the Contract Documents will be returned by the Owner without action.

PART 2 – PRODUCTS (Not Used)

PART 3 – EXECUTION (Not Used)

END OF SECTION 01 33 00

SECTION 01 40 00

QUALITY REQUIREMENTS

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. The section includes administrative and procedural requirements for quality assurance and quality control.
- B. Testing and inspecting services are required to verify compliance with requirements specified or indicated. These services do not relieve the Contractor of responsibility for compliance with the Contract Document requirements.
 - 1. Specific quality-assurance and -control requirements for individual construction activities are specified in the Sections that specify those activities. Requirements in those Sections may also cover production of standard products.
 - 2. Specified tests, inspections, and related actions do not limit Contractor's other quality-assurance and -control procedures that facilitate compliance with the Contract Document requirements.
 - 3. Requirements for Contractor to provide quality-assurance and -control services required by Owner, or authorities having jurisdiction are not limited by provisions of this Section.
 - 4. Specific test and inspection requirements are not specified in this Section.

1.3 DEFINITIONS

- A. Quality-Assurance Services: Activities, actions, and procedures performed before and during execution of the Work to guard against defects and deficiencies and substantiate that proposed construction will comply with requirements.
- B. Quality-Control Services: Tests, inspections, procedures, and related actions during and after execution of the Work to evaluate that actual products incorporated into the Work and completed construction comply with requirements. Services do not include contract enforcement activities performed by the owner.

- C. Preconstruction Testing: Tests and inspections performed specifically for Project before products and materials are incorporated into the Work, to verify performance or compliance with specified criteria.
- D. Product Testing: Tests and inspections that are performed by an NRTL, an NVLAP, or a testing agency qualified to conduct product testing and acceptable to authorities having jurisdiction, to establish product performance and compliance with specified requirements.
- E. Source Quality-Control Testing: Tests and inspections that are performed at the source, e.g., plant, mill, factory, or shop.
- F. Field Quality-Control Testing: Tests and inspections that are performed on-site for installation of the Work and for completed Work.
- G. Testing Agency: An entity engaged to perform specific tests, inspections, or both. Testing laboratory shall mean the same as testing agency.
- H. Installer/Applicator/Erector: Contractor or another entity engaged by Contractor as an employee, Subcontractor, or Sub-subcontractor, to perform a particular construction operation, including installation, erection, application, and similar operations.
 - 1. Use of trade-specific terminology in referring to a trade or entity does not require that certain construction activities be performed by accredited or unionized individuals, or that requirements specified apply exclusively to specific trade(s).
- I. Experienced: When used with an entity or individual, "experienced" means having successfully completed a minimum of five (5) previous projects similar in nature, size, and extent to this Project; being familiar with special requirements indicated; and having complied with requirements of authorities having jurisdiction.

1.4 CONFLICTING REQUIREMENTS

- A. Referenced Standards: If compliance with two or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer conflicting requirements that are different, but apparently equal, to the owner for a decision before proceeding.
- B. Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the

minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of requirements. Refer uncertainties to the owner for a decision before proceeding.

1.5 INFORMATIONAL SUBMITTALS

- A. Testing Agency Qualifications: For testing agencies specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include proof of qualifications in the form of a recent report on the inspection of the testing agency by a recognized authority.
- B. Schedule of Required Tests and Inspections: Prepare in tabular form and include the following:
 - 1. Specification Section number and title.
 - 2. Entity responsible for performing tests and inspections.
 - 3. Description of test and inspection.
 - 4. Identification of applicable standards.
 - 5. Identification of test and inspection methods.
 - 6. Number of tests and inspections required.
 - 7. Time schedule or time span for tests and inspections.
 - 8. Requirements for obtaining samples.
 - 9. Unique characteristics of each quality-control service.

1.6 REPORTS AND DOCUMENTS

- A. Test and Inspection Reports: Prepare and submit certified written reports specified in other Sections. Include the following:
 - 1. Date of issue.
 - 2. Project title and number.
 - 3. Name, address, and telephone number of testing agency.
 - 4. Dates and locations of samples and tests or inspections.
 - 5. Names of individuals making tests and inspections.
 - 6. Description of the Work and test and inspection method.
 - 7. Identification of product and Specification Section.
 - 8. Complete test or inspection data.
 - 9. Test and inspection results and an interpretation of test results.
 - 10. Record of temperature and weather conditions at time of sample taking and testing and inspecting.
 - 11. Comments or professional opinion on whether tested or inspected Work complies with the Contract Document requirements.
 - 12. Name and signature of laboratory inspector.
 - 13. Recommendations on retesting and reinspecting.

- B. Manufacturer's Technical Representative's Field Reports: Prepare written information documenting manufacturer's technical representative's tests and inspections specified in other Sections. Include the following:
 - 1. Name, address, and telephone number of the technical representative making the report.
 - 2. Statement on condition of substrates and their acceptability for installation of product.
 - 3. Statement that products at Project site comply with requirements.
 - 4. Summary of installation procedures being followed, whether they comply with requirements and, if not, what corrective action was taken.
 - 5. Results of operational and other tests and a statement of whether observed performance complies with requirements.
 - 6. Statement whether conditions, products, and installation will affect warranty.
 - 7. Other required items indicated in individual Specification Sections.

- C. Factory-Authorized Service Representative's Reports: Prepare written information documenting manufacturer's factory-authorized service representative's tests and inspections specified in other Sections. Include the following:
 - 1. Name, address, and telephone number of factory-authorized service representative making report.
 - 2. Statement that equipment complies with requirements.
 - 3. Results of operational and other tests and a statement of whether observed performance complies with requirements.
 - 4. Statement whether conditions, products, and installation will affect warranty.
 - 5. Other required items indicated in individual Specification Sections.

- D. Permits, Licenses, and Certificates: For Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records, and similar documents, established for compliance with standards and regulations bearing on performance of the Work.

1.7 QUALITY ASSURANCE

- A. General: Qualifications paragraphs in this article establish the minimum qualification levels required; individual Specification Sections specify additional requirements.

- B. Manufacturer Qualifications: A firm experienced in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.

- C. Fabricator Qualifications: A firm experienced in producing products similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- D. Installer Qualifications: A firm or individual experienced in installing, erecting, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.
- E. Professional Engineer Qualifications: A professional engineer who is legally qualified to practice in the State of West Virginia and who is experienced in providing engineering services of the kind indicated. Engineering services are defined as those performed for installations of the system, assembly, or product that are similar in material, design, and extent to those indicated for this Project.
- F. Specialists: Certain Specification Sections require that specific construction activities shall be performed by entities who are recognized experts in those operations. Specialists shall satisfy qualification requirements indicated and shall be engaged for the activities indicated.
 - 1. Requirements of authorities having jurisdiction shall supersede requirements for specialists.
- G. Testing Agency Qualifications: An NRTL, an NVLAP, or an independent agency with the experience and capability to conduct testing and inspecting indicated, as documented according to ASTM E 329; and with additional qualifications specified in individual Sections; and, where required by authorities having jurisdiction, that is acceptable to authorities.
 - 1. NRTL: A nationally recognized testing laboratory according to 29 CFR 1910.7.
 - 2. NVLAP: A testing agency accredited according to NIST's National Voluntary Laboratory Accreditation Program.
- H. Manufacturer's Technical Representative Qualifications: An authorized representative of the manufacturer who is trained and approved by the manufacturer to observe and inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.
- I. Factory-Authorized Service Representative Qualifications: An authorized representative of the manufacturer who is trained and approved by the manufacturer to inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.

1.8 QUALITY CONTROL

- A. Contractor Responsibilities: Tests and inspections not explicitly assigned to the owner are the Contractor's responsibility. Perform additional quality-control activities required to verify that the Work complies with requirements, whether specified or not.
 - 1. Unless otherwise indicated, provide quality-control services specified and those required by authorities having jurisdiction. Perform quality-control services required of Contractor by authorities having jurisdiction, whether specified or not.
 - 2. Where services are indicated as Contractor's responsibility, engage a qualified testing agency to perform these quality-control services.
 - 3. Notify testing agencies at least twenty-five (24) hours in advance of time when Work that requires testing or inspecting will be performed.
 - 4. Where quality-control services are indicated as Contractor's responsibility, submit a certified written report, in duplicate, of each quality-control service.
 - 5. Testing and inspecting requested by Contractor and not required by the Contract Documents are Contractor's responsibility.
 - 6. Submit additional copies of each written report directly to authorities having jurisdiction, when they so direct.

- B. Manufacturer's Field Services: Where indicated, engage a factory-authorized service representative to inspect field-assembled components and equipment installation, including service connections. Report results in writing as specified in Section 01 33 00 "Submittal Procedures."

- C. Manufacturer's Technical Services: Where indicated, engage a manufacturer's technical representative to observe and inspect the Work. Manufacturer's technical representative's services include participation in preinstallation conferences, examination of substrates and conditions, verification of materials, observation of Installer activities, inspection of completed portions of the Work, and submission of written reports.

- D. Retesting/Reinspecting: Regardless of whether original tests or inspections were Contractor's responsibility, provide quality-control services, including retesting and reinspecting, for construction that replaced Work that failed to comply with the Contract Documents.

- E. Testing Agency Responsibilities: Cooperate with Owner and Contractor in performance of duties. Provide qualified personnel to perform required tests and inspections.
 - 1. Notify Owner and Contractor promptly of irregularities or deficiencies observed in the Work during performance of its services.

2. Determine the location from which test samples will be taken and in which in-situ tests are conducted.
 3. Conduct and interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from requirements.
 4. Submit a certified written report, in duplicate, of each test, inspection, and similar quality-control service through Contractor.
 5. Do not release, revoke, alter, or increase the Contract Document requirements or approve or accept any portion of the Work.
 6. Do not perform any duties of Contractor.
- F. Associated Services: Cooperate with agencies performing required tests, inspections, and similar quality-control services, and provide reasonable auxiliary services as requested. Notify the agency sufficiently in advance of operations to permit assignment of personnel. Provide the following:
1. Access to the Work.
 2. Incidental labor and facilities necessary to facilitate tests and inspections.
 3. Adequate quantities of representative samples of materials that require testing and inspecting. Assist agency in obtaining samples.
 4. Facilities for storage and field curing of test samples.
 5. Delivery of samples to testing agencies.
 6. Preliminary design mix proposed for use for material mixes that require control by testing agency.
 7. Security and protection for samples and for testing and inspecting equipment at Project site.
- G. Coordination: Coordinate sequence of activities to accommodate required quality-assurance and -control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspecting.
1. Schedule times for tests, inspections, obtaining samples, and similar activities.

PART 2 – PRODUCTS (Not Used)

PART 3 – EXECUTION

3.1 TEST AND INSPECTION LOG

- A. Test and Inspection Log: Prepare a record of tests and inspections. Include the following:
1. Date test or inspection was conducted.
 2. Description of the Work tested or inspected.
 3. Date test or inspection results were transmitted to Owner.
 4. Identification of testing agency or special inspector conducting test or inspection.

- B. Maintain log at Project site. Post changes and revisions as they occur. Provide access to test and inspection log for Owners and Owner's Representatives reference during normal working hours.

3.2 REPAIR AND PROTECTION

- A. General: On completion of testing, inspecting, sample taking, and similar services, repair damaged construction and restore substrates and finishes.
 - 1. Provide materials and comply with installation requirements specified in other Specification Sections or matching existing substrates and finishes. Restore patched areas and extend restoration into adjoining areas with durable seams that are as invisible as possible.
- B. Protect construction exposed by or for quality-control service activities.
- C. Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for quality-control services.

END OF SECTION 01 40 00

SECTION 01 60 00

PRODUCT REQUIREMENTS

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. The section includes administrative and procedural requirements for selection of products for use in Project; product delivery, storage, and handling; manufacturers' standard warranties on products; special warranties; and comparable products.
- B. Related Requirements:
 - 1. Section 01 25 00 – Substitution Procedures

1.3 DEFINITIONS

- A. Products: Items obtained for incorporating into the Work, whether purchased for Project or taken from previously purchased stock. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.
 - 1. Named Products: Items identified by manufacturer's product name, including make or model number or other designation shown or listed in manufacturer's published product literature, that is current as of date of the Contract Documents.
 - 2. New Products: Items that have not previously been incorporated into another project or facility. Products salvaged or recycled from other projects are not considered new products.
 - 3. Comparable Product: Product that is demonstrated and approved through a submittal process to have the indicated qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics that equal or exceed those of specified product.
- B. Basis-of-Design Product Specification: A specification in which a specific manufacturer's product is named and accompanied by the words "basis-of-design product," including make or model number or other designation, to establish the significant qualities related to type, function, dimension, in-service performance,

physical properties, appearance, and other characteristics for purposes of evaluating comparable products of additional manufacturers named in the specification.

1.4 ACTION SUBMITTALS

- A. Comparable Product Requests: Submit request for consideration of each comparable product. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
1. Requests can be submitted only by contractors that attended the mandatory pre-bid meeting. Requests from entities not permitted to bid on the project will not be accepted.
 2. Requests for consideration must be received 10 business days prior to the bid due date.
 3. Include data to indicate compliance with the requirements specified in "Comparable Products" Article. This data should include, but is not limited to:
 - a. Product Data: Provide manufacturer's technical product data for each type of roofing product specified. Include data substantiating that materials comply with specified requirements.
 - b. Specimen Warranty: Provide an unexecuted copy of the warranty specified for this Project, identifying the terms and conditions required of the Manufacturer and the Owner.
 - c. Roofing Maintenance Instructions: Provide a roof care and maintenance manual of manufacturer's recommendations for maintenance of installed roofing systems.
 - d. Roofing System Manufacturer's Evaluation: Provide a comprehensive written assessment comparing available roofing solutions with validation of why the roofing system selection for the specific project is suitable and appropriate.
 - e. Roofing System Manufacturer's Report Form: Provide a copy of the report form utilized by the roofing system manufacturer for progress inspections to monitor installation and quality.
 - f. Manufacturer's Installation Instructions: Submit installation instructions and recommendations indicating special precautions required for installing the membrane.
 - g. Manufacturer's Certificate: Certify that roof system furnished is approved by Factory Mutual Global, Underwriters Laboratories, Warnock Hersey or approved third party testing facility in accordance with ASTM E108, Class [A or B or C] for external fire and meets local or nationally recognized building codes.
 - h. Manufacturer's Certificate: Submit a certified copy of the roofing manufacturer's ISO 9001 compliance certificate.

- i. Written certification from the roofing system manufacturer certifying the applicator is currently authorized for the installation of the specified roof system.
 - j. Field Quality Control: Provide a letter from the manufacturer verifying that they can meet all of the requirements for weekly QA/QC inspections and reporting as outlined in the specification.
4. Owner's Action: If necessary, the owner will request additional information or documentation for evaluation within one week of receipt of a comparable product request. Owner will notify Contractor of approval or rejection of proposed comparable product request within 15 days of receipt of request, or seven days of receipt of additional information or documentation, whichever is later.
- a. Form of Approval: As specified in Division 01 Section "Submittal Procedures."
 - b. Use product specified if OWNER does not issue a decision on use of a comparable product request within time allocated.

1.5 QUALITY ASSURANCE

- A. Compatibility of Options: If Contractor is given the option of selecting between two or more products for use on Project, select product compatible with products previously selected, even if previously selected products were also options.

1.6 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle products using means and methods that will prevent damage, deterioration, and loss, including theft and vandalism. Comply with manufacturer's written instructions.
- B. Delivery and Handling:
 - 1. Schedule delivery to minimize long-term storage at Project site and to prevent overcrowding of construction spaces.
 - 2. Coordinate delivery with installation time to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other losses.
 - 3. Deliver products to Project site in an undamaged condition in manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
 - 4. Inspect products on delivery to determine compliance with the Contract Documents and to determine that products are undamaged and properly protected.

- C. Storage:
 - 1. Store products to allow for inspection and measurement of quantity or counting of units.
 - 2. Store materials in a manner that will not endanger Project structure.
 - 3. Store products that are subject to damage by the elements, undercover in a weather tight enclosure above ground, with ventilation adequate to prevent condensation.
 - 4. Store cementitious materials on elevated platforms, under cover, and in a dry location. Do not use cementitious materials that have become damp.
 - 5. Protect foam plastic from exposure to sunlight, except to the extent necessary for the period of installation and concealment.
 - 6. Comply with product manufacturer's written instructions for temperature, humidity, ventilation, and weather-protection requirements for storage.
 - 7. Protect stored products from damage and liquids from freezing.
 - 8. Coordinate with other contractors working on the project site that are contracted separately to the Owner.

1.7 PRODUCT WARRANTIES

- A. Warranties specified in other Sections shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of obligations under requirements of the Contract Documents.
 - 1. Manufacturer's Warranty: Written warranty furnished by individual manufacturer for a particular product and specifically endorsed by manufacturer to Owner.
 - 2. Special Warranty: Written warranty required by the Contract Documents to provide specific rights for the owner.
- B. Special Warranties: Prepare a written document that contains appropriate terms and identification, ready for execution.
 - 1. Manufacturer's Standard Form: Modified to include Project-specific information and requirements and properly executed.
 - 2. Specified Form: When specified forms are included with the Specifications, prepare a written document using indicated form properly executed.
 - 3. Refer to Divisions 02 through 33. Sections for specific content requirements and particular requirements for submitting special warranties.
- C. Submittal Time: Comply with requirements in Division 01 Section "Closeout Procedures."

PART 2 – PRODUCT SELECTION PROCEDURES

- A. General Product Requirements: Provide products that comply with the Contract Documents, are undamaged and, unless otherwise indicated, are new at time of installation.
1. Provide products complete with accessories, trim, finish, fasteners, and other items needed for a complete installation and indicated use and effect.
 2. Standard Products: If available, and unless custom products or nonstandard options are specified, provide standard products of types that have been produced and used successfully in similar situations on other projects.
 3. The owner reserves the right to limit selection to products with warranties not in conflict with requirements of the Contract Documents.
 4. Where products are accompanied by the term "as selected," the owner will make a selection.
 5. Descriptive, performance, and reference standard requirements in the Specifications establish salient characteristics of products.
 6. Or Equal: For products specified by name and accompanied by the term "or equal," or "or approved equal," or "or equivalent," or "or approved," comply with requirements in "Comparable Products" Article to obtain approval for use of an unnamed product.
 7. All products shall be free from asbestos.
- B. Product Selection Procedures:
1. Product: Where Specifications name a single manufacturer and product, provide the named product that complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered.
 2. Manufacturer/Source: Where Specifications name a single manufacturer or source, provide a product by the named manufacturer or source that complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered.
 3. Products:
 - a. Restricted List: Where Specifications include a list of names of both manufacturers and products, provide one of the products listed that complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered.
 - b. Non Restricted List: Where Specifications include a list of names of both available manufacturers and products, provide one of the products listed, or an unnamed product, that complies with requirements. Comply with requirements in "Comparable Products" Article for consideration of an unnamed product.
 4. Manufacturers:
 - a. Restricted List: Where Specifications include a list of manufacturers' names, provide a product by one of the manufacturers listed that complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered.

- b. Non Restricted List: Where Specifications include a list of available manufacturers, provide a product by one of the manufacturers listed, or a product by an unnamed manufacturer, that complies with requirements. Comply with requirements in "Comparable Products" Article for consideration of an unnamed manufacturer's product.
- 5. Basis-of-Design Product: Where Specifications name a product, or refer to a product indicated on Drawings, and include a list of manufacturers, provide the specified or indicated product or a comparable product by one of the other named manufacturers. Drawings and Specifications indicate sizes, profiles, dimensions, and other characteristics that are based on the product named. Comply with requirements in "Comparable Products" Article for consideration of an unnamed product by one of the other named manufacturers.
- C. Visual Matching Specification: Where Specifications require "match Owner's sample", provide a product that complies with requirements and matches Owner's sample. The owner's decision will be final on whether a proposed product matches.
 - 1. If no product available within specified category matches and complies with other specified requirements, comply with requirements in Division 01 Section "Substitution Procedures" for proposal of product.
- D. Visual Selection Specification: Where Specifications include the phrase "as selected by owner from manufacturer's full range" or similar phrase, select a product that complies with requirements. The owner will select color, gloss, pattern, density, or texture from the manufacturer's product line that includes both standard and premium items.

2.2 COMPARABLE PRODUCTS

- A. Conditions for Consideration: Client will consider Contractor's request for comparable product when the following conditions are satisfied. If the following conditions are not satisfied, Client may return requests without action, except to record noncompliance with these requirements:
 - 1. Evidence that the proposed product does not require revisions to the Contract Documents, that it is consistent with the Contract Documents and will produce the indicated results, and that it is compatible with other portions of the Work.
 - 2. Detailed comparison of significant qualities of proposed product with those named in the Specifications. Significant qualities include attributes such as performance, weight, size, durability, visual effect, and specific features and requirements indicated.
 - 3. Evidence that the proposed product provides specified warranty.
 - 4. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners, if requested.

5. Samples, if requested.

PART 3 – EXECUTION (Not Used)

END OF SECTION 01 60 00

SECTION 01 77 00

CLOSEOUT PROCEDURES

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
 - 1. Substantial Completion procedures.
 - 2. Final completion procedures.
 - 3. Warranties.
 - 4. Final cleaning.
 - 5. Correction/repair of the Work.
- B. Related Requirements:
 - 1. Section 01 33 00 - Submittals

1.3 ACTION SUBMITTALS

- A. Product Data: For cleaning agents.
- B. Contractor's List of Incomplete Items (Punch List): Initial submittal at Substantial Completion.
- C. Certified List of Incomplete Items: Final submittal at Final Completion.

1.4 CLOSEOUT SUBMITTALS

- A. Certificates of Release: From authorities having jurisdiction.
- B. Certificate of Insurance: For continuing coverage.
- C. Field Report: Final inspection.

1.5 MAINTENANCE MATERIAL SUBMITTALS

- A. Schedule of Maintenance Material Items: For maintenance material submittal items specified in other Sections.

1.6 SUBSTANTIAL COMPLETION PROCEDURES

- A. Contractor's List of Incomplete Items (Punch List): Prepare and submit a list of items to be completed and corrected (Contractor's punch list), indicating the value of each item on the list and reasons why the Work is incomplete.
- B. Submittals Prior to Requesting Inspection for Determining Date of Substantial Completion: Complete the following a minimum of ten (10) calendar days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.
 - 1. Certificates of Release: Obtain and submit releases from authorities having jurisdiction permitting Owner unrestricted use of the Work and access to services and utilities. Include use and occupancy (U&O) permits, operating certificates, and similar releases.
 - 2. Submit closeout submittals specified in other Division 01 and Division 07 Sections, including project record documents, operation and maintenance manuals, photographic documentation, damage or settlement surveys, property surveys, and similar final record information.
 - 3. Submit closeout submittals specified in individual Sections, including specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
 - 4. Submit maintenance material submittals specified in individual Sections, including tools, spare parts, extra materials, and similar items, and deliver to location designated by Owner. Label with manufacturer's name and model number where applicable.
 - a. Schedule of Maintenance Material Items: Prepare and submit schedule of maintenance material submittal items, including name and quantity of each item and name and number of related Specification Section. Obtain Owner's signature for receipt of submittals.
 - 5. Submit test/adjust/balance records.
 - 6. Submit changeover information related to Owner's occupancy, use, operation, and maintenance.
- C. Procedures Prior to Requesting Inspection for Determining Date of Substantial Completion: Complete the following a minimum of ten (10) calendar days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.
 - 1. Advise Owner of pending insurance changeover requirements.

2. Make final changeover of permanent locks and deliver keys to Owner. Advise Owner's personnel of changeover in security provisions.
3. Complete startup and testing of systems and equipment.
4. Perform preventive maintenance on equipment used prior to Substantial Completion.
5. Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems.
6. Advise Owner of changeover in heat and other utilities.
7. Participate with Owner in conducting inspection and walkthrough with local emergency responders.
8. Terminate and remove temporary facilities from the Project site, along with mockups, construction tools, and similar elements.
9. Complete final cleaning requirements, including touchup painting.
10. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.

D. Inspection: Submit a written request for inspection to determine Substantial Completion a minimum of ten (10) calendar days prior to date the work will be completed and ready for final inspection and tests. On receipt of request, Owner will either proceed with inspection or notify Contractor of unfulfilled requirements. Owner will prepare the Certificate of Substantial Completion after inspection or will notify the Contractor of items, either on the Contractor's list or additional items identified by Owner, that must be completed or corrected before certificate will be issued.

1.7 FINAL COMPLETION PROCEDURES

- A. Preliminary Procedures: Before requesting final inspection for determining final completion, complete the following:
1. Submit a final Application for Payment according to Section 01 29 00 "Payment Procedures."
 2. Certified List of Incomplete Items: Submit certified copy of Owner's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Owner. Certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
 3. Certificate of Insurance: Submit evidence of final, continuing insurance coverage complying with insurance requirements.
 4. Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems.

1.8 LIST OF INCOMPLETE ITEMS (PUNCH LIST)

- A. Organization of List: Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction.
 - 1. Organize a list of spaces in sequential order.
 - 2. Organize items applying to each space by major element.
 - 3. Include the following information at the top of each page:
 - a. Project name.
 - b. Date.
 - c. Name of Owner.
 - d. Name of Contractor.
 - e. Page number.
 - 4. Submit list of incomplete items (Punch List) in one of the following formats:
 - a. PDF electronic file. Owner will return the annotated file.

1.9 SUBMITTAL OF PROJECT WARRANTIES

- A. Time of Submittal: Submit written warranties on request of Owner for designated portions of the Work where commencement of warranties other than date of Substantial Completion is indicated, or when delay in submittal of warranties might limit Owner's rights under warranty.
- B. Organize warranty documents into an orderly sequence based on the table of contents of Project Manual.
 - 1. Bind warranties and bonds in heavy-duty, three-ring, vinyl-covered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2-by-11-inch paper.
 - 2. Provide heavy paper dividers with plastic-covered tabs for each separate warranty. Mark tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product and the name, address, and telephone number of Installer.
 - 3. Identify each binder on the front and spine with the typed or printed title "WARRANTIES," Project name, and name of Contractor.
- C. Provide additional copies of each warranty to include in operation and maintenance manuals.

PART 2 – PRODUCTS

2.1 MATERIALS

- A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

PART 3 – EXECUTION

3.1 FINAL CLEANING

- A. General: Perform final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and anti pollution regulations.
- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to conditions expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.
 - 1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a designated portion of Project:
 - a. Clean Project site, yard, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.
 - b. Sweeping paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.
 - c. Rake grounds that are neither plants nor paved to a smooth, even-textured surface.
 - d. Remove tools, construction equipment, machinery, and surplus material from the Project site.
 - e. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
 - f. Remove debris and surface dust from limited access spaces, including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces.
 - g. Sweep concrete floors broom clean in unoccupied spaces.
 - h. Vacuum carpet and similar soft surfaces, removing debris and excess nap; clean according to manufacturer's recommendations if visible soil or stains remain.
 - i. Clean transparent materials, including mirrors and glass in doors and windows. Remove glazing compounds and other noticeable, vision-obscuring materials. Polish mirrors and glass, taking care not to scratch surfaces.
 - j. Remove labels that are not permanent.

- k. Wipe surfaces of mechanical and electrical equipment and similar equipment. Remove excess lubrication, paint and mortar droppings, and other foreign substances.
- l. Clean plumbing fixtures to a sanitary condition, free of stains, including stains resulting from water exposure.
- m. Replace disposable air filters and clean permanent air filters. Clean exposed surfaces of diffusers, registers, and grills.
- n. Clean ducts, blowers, and coils if units were operated without filters during construction or that display contamination with particulate matter on inspection.

3.2 CORRECTION/REPAIR OF THE WORK

- A. Complete repair and restoration operations before requesting inspection for determination of Substantial Completion.
- B. Repair or remove and replace defective construction. Restore damaged substrates and finishes. Repair components that do not operate properly. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment. Where damaged or worn items cannot be repaired or restored, provide replacements. Remove and replace operating components that cannot be repaired. Restore damaged construction and permanent facilities used during construction to specified condition.
 - 1. Remove and replace chipped, scratched, and broken glass, reflective surfaces, and other damaged transparent materials.
 - 2. Touch up and otherwise repair and restore marred or exposed finishes and surfaces. Replace finishes and surfaces that already show evidence of repair or restoration. Remove and replace damaged surfaces that are exposed to view if surfaces cannot be repaired without visible evidence of repair.
 - a. Do not paint over "UL" and other required labels and identification, including mechanical and electrical nameplates. Remove paint applied to required labels and identification.
 - 3. Replace parts subject to operating conditions during construction that may impede operation or reduce longevity.

END OF SECTION 01 77 00

SECTION 07 72 53

SNOW RETENTION SYSTEM, MECHANICALLY FASTENED

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including the Conditions of the Contract and Division 01 Specification Sections apply to this section.

1.2 SUMMARY

- A. Work described in this section includes a metal standing seam roof-mounted snow retention system complete with clamps, cross members, and snow and ice clips.

1.3 Related Sections:

- A. Section 07 41 13 – Metal Roof Panels

1.4 REFERENCES

- A. American Society of Civil Engineers (ASCE):
- B. ASCE 7-05 Minimum Design Loads for Buildings and Other Structures

1.5 SUBMITTALS FOR REVIEW

- A. Shop Drawings: Shop drawings showing details of all components to be utilized in their prescribed, pre-manufactured, three-dimensional form.
- B. Shop drawings must be completed by the snow retention device supplier's engineering department.
- C. Product Data:
- D. Manufacturers' product catalogues or descriptive data, standard specifications, and details.
- E. Technical data to substantiate compliance with these specifications.

1.6 SUBMITTALS FOR INFORMATION

- A. Test Reports: Provide certified test reports from an independent testing laboratory to document compliance with specified performance criteria. Furnish evidence of product testing performed specifically on the panel seam and gauge being utilized on the project. Clearly indicate tensile load-to-failure of clamp in a direction parallel to the seam.

- B. Design Load Calculations: Submit copy of manufacturer's minimum design load calculations according to ASCE 7-05, Method 2 for Components and Cladding. Refer to Design and Performance Criteria article.

1.7 CONTRACT CLOSEOUT SUBMITTALS

- A. Special Project Warranty: Provide specified warranty for the Project, executed by the authorized agent of the Manufacturer.
- B. Roofing Maintenance Instructions. Provide a manual of manufacturer's recommendations for maintenance of installed roofing systems.

1.8 QUALITY ASSURANCE

- A. Installer Qualifications:
 - 1. The installer shall have completed the manufacturer's Approved Roofing Contractor course and/or demonstrates competence in the installation of manufactured roof specialties.
 - 2. Provide documentation that the superintendent and foreman selected for this project have been approved by the manufacturer or submit for manufacturer's approval a resume of completed projects of similar type and extent in which personnel have been involved.
- B. Manufacturer's Qualifications:
 - 1. Snow retention system manufacturers shall be a nationally recognized prime manufacturer of metal roof systems.
 - 2. The manufacturer shall have direct authority and control over all fabrication of steel components as well as the raw materials used in their fabrication.
 - 3. Manufacturers shall be a member of the National Roofing Contractors Association (NRCA) and shall abide by the published standard practices of the organization.
 - 4. The manufacturer shall have in place a documented, standardized method for maintaining quality control such as ISO-9001 approval.
- C. Designer/Inspector Qualifications:
 - 1. The snow retention system shall be designed by an employee of the supplier who has visited the job site and has familiarized himself with all conditions of the job.
 - 2. The designer shall conduct all required periodic inspections of work in progress as described herein and shall furnish written documentation of all such inspections.

1.9 DELIVERY, STORAGE, AND HANDLING

- A. Deliver components to the project site properly packages for protection against damage in transportation.
- B. Pack accessories in sturdy cardboard cases with paper slip sheets or similar separator between all painted surfaces to minimize scratches.
- C. The installer should verify and correct the quantity and condition of all materials prior to accepting delivery.
- D. Remove and isolate copper, lead, and other dissimilar metals prior to installation of steel products.

1.10 PROJECT CONDITIONS

- A. Field Measurements: It is the installer's responsibility to confirm field dimensions prior to ordering for fabrication.

1.11 PRE-INSTALLATION CONFERENCE

- A. Convene a pre-installation conference approximately two (2) weeks before scheduled commencement of system installation and associated work.
- B. Require attendance of installer of each component of associated work, installers of deck or substrate construction to receive roofing work, installers of rooftop units and other work in and around roofing which must precede or follow work (including mechanical work if any), Owner, roofing system manufacturer's representative, and other representatives directly concerned with performance of the Work, including (where applicable) Owner's insurers, testing agencies and governing authorities.
- C. Objectives of conference to include:
 - 1. Review foreseeable methods and procedures related to work, including set up and mobilization areas for stored material and work area.
 - 2. Tour representative areas of roofing substrates (decks), inspect and review condition of substrate, roof drains, curbs, penetrations and other preparatory work performed by others.
 - 3. Review structural loading limitations of the deck and inspect the deck for loss of flatness and for required attachment.
 - 4. Review system requirements (drawings, specifications and other contract documents).
 - 5. Review required submittals both completed and yet to be completed.

6. Review and finalize construction schedule related to work and verify availability of materials, installer's personnel, equipment and facilities needed to make progress and avoid delays.
7. Review required inspection, testing, certifying and material usage accounting procedures.
8. Review weather and forecasted weather conditions and procedures for coping with unfavorable conditions, including possibility of temporary roofing (if not mandatory requirement).
9. Record discussions of the conference including decisions and agreements (or disagreements) reached and furnished a copy of record to each party attending. If substantial disagreements exist at the conclusion of the conference, determine how disagreements will be resolved and set a date for the reconvening conference.
10. Review notification procedures for inclement weather or non-working days.
11. The Owner's Representative will designate one of the conference participants to record the proceedings and promptly distribute them to the participants for record.
12. The intent of the conference is to resolve issues affecting the installation and performance of roofing work. Do not proceed with roofing work until such issues are resolved to the satisfaction of the Owner and Engineer of Record. This shall not be construed as interference with the progress of Work on the part of the Owner or Engineer of Record.

1.12 DESIGN AND PERFORMANCE CRITERIA

- A. Uniform Snow Load Capacity: Installed snow retention system shall withstand snow loading complying with the following criteria.
 1. Design Code: ASCE 7-05, Method 2 for Components and Cladding
 2. Safety Factor: 4.0 after any load reduction or material stress increase
 3. Snow Load: 26.3 psf.
 4. Roof Pitch: 4 inches per foot.
 5. Run to Ridge: 35 feet.
 6. Importance Factor: III
 7. Exposure: C
 8. Terrain Factor: Fully
 9. Thermal Factor: 1.1

1.13 WARRANTY

- A. All steel and paint finishes shall be warranted by the manufacturer to be free from red rust, chipping, cracking, flaking, blisters or peeling for a period of twenty (20) years.

PART 2 – PRODUCTS

2.1 PRODUCTS, GENERAL

- A. Basis of Design: The Garland Company, Inc.
 - 1. 3800 E. 91st St., Cleveland, OH 44105.
 - 2. Manufacturer's Representative:
 - a. Christian Reeves; CReeves@garlandind.com; 304-951-8940
- B. Basis of Design Materials, manufacturer's product designations, and/or manufacturer's names specified herein shall be regarded as the minimum standard of quality required for the work of this Section. Comply with all manufacturer and contractor/fabricator quality and performance criteria specified in Part 1.

2.2 SYSTEM DESCRIPTION

- A. Roof Attachment Clamps: Provide aluminum standing seam roof clamp. Carbon steel or plastic parts are not acceptable. No fastener penetrations of the roof membrane will be permitted. No systems that rely on adhesives for attachment will be permitted. Clamp to attach to the standing seam will have two stainless steel set screws (3/8" minimum diameter) having rounded points. One clamp shall be installed per standing seam for each row of S-5! "ColorGard".
- B. Cross member: S-5! "ColorGard" extrusion with receptacle in the face to provide for inserting of color strip. The color strip is to be the same pre-finished material and originate from the same supplier as the roof panels. Cross members are to be continuous and include splice connectors to join adjacent sections, ensuring alignment and structural continuity. A cross member is attached to clamps using 3/8" diameter stainless steel bolts.
- C. Snow/Ice Clips: Mandatory on panel seam heights of 2" or greater. Furnish only if shown on plans for panel seam heights below 2" S-5! "Snow Clips" are to be aluminum or stainless steel, with rubber "foot". Clip to attach to cross member and rest on panel flat, between panel seams, to retard movement of snow/ice beneath cross member. Use one clip per panel for seam spacing of 18" or less: two clips per panel for seam spacing over 18".

2.3 MATERIALS

- A. Clamps and versa Bracket: Manufactured from certified 6061 T6 extruded aluminum, in strict conformity with The Aluminum Association, Incorporated "Aluminum Standards and Data" and ASTM standard B-221. Cast parts are not permitted.

- B. Cross member: Manufactured from certified 6061 T6 aluminum, in strict conformity with The Aluminum Association, Incorporated “Aluminum Standards and Data” and ASTM standard B-221. Minimum breaking strength of 175 pounds per linear inch. Cross members must be furnished with splice pieces to align adjacent sections and maintain continuity.
- C. Color Strip
- D. Steel: Aluminum-Zinc Alloy Coated, ASTM A792, Coating Designation AZ-50, in thickness of .0336 by min. 36 in. by coil, chemically treated, commercial lock-forming quality.
- E. Steel Finishes: Fluorocarbon, epoxy primer baked on both sides, as approved by the finish coat manufacturer.
- F. Fasteners and Other Hardware: Each clamp is to be secured to the panel seam with a minimum of two set screws, having nominal diameter of 0.375”. Set screws are to have a round nose point to prevent damage to the panel finish. Cup point set screws are not acceptable. Set screws and other clamp hardware is to be either 300 series stainless steel (18-8 alloy) having no iron content, or aluminum. Attachment bolt for clamp is to be 0.375” diameter with washer.

2.4 SOURCE QUALITY CONTROL

- A. Manufacturers shall furnish written documentation that all products were furnished by said single-source manufacturer.
- B. The manufacturer shall furnish all other documentation as required herein.

PART 3 – EXECUTION

3.1 PREPARATION

- A. Clean Surface: Verify that panel seam area is reasonably clean and free of visible dirt and foreign matter at the clamp locations prior to installing clamps.
- B. Seaming Complete: Verify that any required machine seaming is complete prior to installation.
- C. Panel attachment: Verify that panels are adequately attached and supported to the building structure to resist any loads imposed on the S-5! Clamp.
- D. Free Drainage: Verify that completed assembly installation will not in any way impede proper drainage of roof panels.
- E. Discrepancies: Report any discrepancies to the above to the Project designer before proceeding with the work.

3.2 INSTALLATION

- A. Layout: Carefully lay out desired assembly locations true-to-line prior to installing clamps or Versa brackets. Clamp shall avoid panel attachment clips if the clip is a single piece design.
- B. Clamp Installation: Assemble set screws to clamp and clamp to seam following all manufacturers printed instructions. Both set screws are to be at the same side of the clamp. When application relies upon tested load-to-failure values, manufacturer's minimum recommended set screw tension shall be randomly verified using calibrated torque wrench per manufacturer's instructions.
- C. System Installation: Install snow retention assemblies straight and true-to-line. Secure all color strip material to ColorGard per manufacturer's instructions. Join adjacent sections with splice pieces provided. Do not cantilever cross members more than 6" past the last clamp in an assembly.
- D. Fall Protection: Provide necessary fall and other hazard protection in accordance with OSHA regulations when installing snow retention assemblies.
- E. Cleaning: Clean roof of any residual debris resulting from installation.

3.3 CLEANING

- A. Clean installed work in accordance with the manufacturer's instructions.
- B. Replace damaged work that cannot be restored by normal cleaning methods.

3.4 CONSTRUCTION WASTE MANAGEMENT

- A. Remove and properly dispose of waste products generated during roofing procedures. Comply with the requirements of authorities having jurisdiction.

3.5 FINAL INSPECTION

- A. At completion of installation and associated work, meet with Contractor, installer, installer of associated work, Owner, roofing system manufacturer's representative and other representatives directly concerned with performance of roofing system.
- B. Inspect work and flashing of roof penetrations, walls, curbs and other equipment. List all items requiring correction or completion and furnish a copy of the list to each party in attendance.
- C. Repair or replace deteriorated or defective work found at the time above inspection as required to produce an installation which is free of damage and deterioration at time of Substantial Completion and according to warranty requirements.
- D. Notify the Owner upon completion of corrections.

- E. Following the final inspection, provide written notice of acceptance of the installation from the system manufacturer.

3.6 DEMONSTRATION AND TRAINING

- A. At a time and date agreed to by the Owner, instruct the Owner's facility manager, or other representative designated by the Owner, on the following procedures.
 - 1. Troubleshooting procedures.
 - 2. Notification procedures for reporting leaks or other apparent roofing problems.
 - 3. Maintenance
 - 4. The Owner's obligations for maintaining the warranty in effect and force.
 - 5. The Manufacturer's obligations for maintaining the warranty in effect and force.

PART 4 END OF SECTION

SECTION 07 22 00

ROOF DECK, INSULATION AND COVERBOARDS

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including the Conditions of the Contract and Division 01 Specification Sections apply to this section.

1.2 SUMMARY

- A. The section includes roof insulation over the properly prepared deck substrate.
- B. Related Sections:
 - 1. Section 07 41 13 – Metal Roof Panels.

1.3 REFERENCES

- A. American Society for Testing and Materials (ASTM):
 - 1. ASTM C1289 Standard Specification for Faced Rigid Polyisocyanurate Thermal Insulation.
 - 2. ASTM D412 Standard Test Methods for Vulcanized Rubber and Thermoplastic Rubbers and Thermoplastic Elastomers-Tension.
- B. Factory Mutual Research (FM):
 - 1. Roof Assembly Classifications.
- C. National Roofing Contractors Association (NRCA):
 - 1. Roofing and Waterproofing Manual.
- D. Insulation Board, Polyisocyanurate (FS HH-I-1972)

1.4 SUBMITTALS

- A. Product Data: Provide manufacturer's specification data sheets for each product.
- B. Shop Drawings
 - 1. Submit manufacturer's shop drawings indicating complete installation details of tapered insulation system, including identification of each insulation block, sequence of installation, layout, drain locations, roof slopes, thicknesses, crickets and saddles.

2. Shop drawing shall include: Outline of roof, location of drains, complete board layout of tapered insulation components, thickness and the average “R” value for the completed insulation system.

1.5 QUALITY ASSURANCE

- A. Fire Classification, ASTM E-108.
- B. Pre-installation meeting: Refer to Division 07 roofing specifications for pre-installation meeting requirements.

1.6 DELIVERY, STORAGE AND HANDLING

- A. Deliver products to site with seals and labels intact, in manufacturer’s original containers, dry and undamaged.
- B. Store all insulation materials in a manner to protect them from the wind, sun and moisture damage prior to and during installation. Any insulation that has been exposed to any moisture shall be removed from the project site.
- C. Keep materials enclosed in a watertight, ventilated enclosure (i.e. tarpaulins).
- D. Store materials off the ground. Any warped, broken or wet insulation boards shall be removed from the site.

PART 2 – PRODUCTS

2.1 PRODUCTS, GENERAL

- A. Basis of Design: Materials, manufacturer’s product designations, and/or manufacturer’s names specified herein shall be regarded as the minimum standard of quality required for work of this Section. Comply with all manufacturer and contractor/fabricator quality and performance criteria specified in Part 1.

2.2 INSULATION MATERIALS

- A. Thermal Insulation Properties and Approved Insulation Boards.
 1. Rigid Polyisocyanurate Roof Insulation; ASTM C1289:
 - a. Qualities: Rigid, closed cell polyisocyanurate foam core bonded to heavy duty glass fiber mat facers.
 - b. Thickness: Minimum 0”
 - c. R-Value: Minimum 5.7 per inch
 - d. Compliances: UL, WH or FM listed under Roofing Systems
 - e. Federal Specification HH-I-1972, Class 1.

- 1) Acceptable Products:
 - 2) Wise Products Group, WPG-Flat
 - 3) ENRGY-3; Johns Manville
 - 4) Hytherm; Dow
 - 5) EnergyGuard; GAF
 - 6) Approved Equivalent
2. Tapered Polyisocyanurate Roof Insulation; ASTM C1289:
 - a. Qualities: Factory Tapered, closed cell polyisocyanurate foam core bonded to heavy duty glass fiber mat facers.
 - b. Thickness: Minimum 0"
 - c. Average R-Value: Minimum 5.7 per inch
 - d. Tapered Slope: 1/4:12, 1/2:12
 - e. Compliances: UL, WH or FM listed under Roofing Systems Federal Specification HH-I-1972, Class 1
 - 1) Acceptable Products:
 - 2) Wise Products Group, WPG-Tapered CG
 - 3) ENRGY 3; Johns Manville
 - 4) EnergyGuard; GAF
 - 5) Approved Equivalent
 3. Gypsum Roof Cover Board
 - a. Qualities: Nonstructural, noncombustible, water-resistant treated gypsum core panel.
 - b. Board Size: Four feet by four feet (4'x4').
 - c. Thickness: One half (1/2) inch.
 - d. Compliances: UL, WH or FM listed under Roofing Systems.
 - e. Acceptable Products:
 - 1) Dens Deck Prime; Georgia Pacific
 - 2) Approved Equivalent

2.3 RELATED MATERIALS

- A. Fiber Cant and Tapered Edge Strips: Performed rigid insulation units of sizes/shapes indicated, matching insulation board or of perlite or organic fiberboard, as per the approved manufacturer.
 1. Acceptable Manufacturers:
 - a. Celotex
 - b. Johns Manville
 - c. GAF
 - d. Approved Equivalent
- B. Protection Board: Pre-molded semi-rigid asphalt composition board one half (1/2) inch.

- C. Fasteners: Corrosion resistant screw fastener as recommended by roof membrane manufacturer.
 - 1. Factory Mutual Tested and Approved with three (3) inches coated disc for I-90 rating, length required to penetrate metal deck one inch.

PART 3 – EXECUTION

3.1 INSPECTOR OF SURFACES

- A. The roofing contractor shall be responsible for preparing an adequate substrate to receive insulation.
 - 1. Verify that work which penetrates the roof deck has been completed.
 - 2. Verify that wood nailers are properly and securely installed.
 - 3. Examine surfaces for defects, rough spots, ridges, depressions, foreign material, moisture, and unevenness.
 - 4. Do not proceed until defects are corrected.
 - 5. Do not apply insulation until the substrate is sufficiently dry.
 - 6. Broom clean substrate immediately prior to application.
 - 7. Use additional insulation to fill depressions and low spots that would otherwise cause ponding water.
 - 8. Verify that the temporary roof has been completed.

3.2 INSTALLATION

- A. Attachment with Mechanical Fasteners
 - 1. Approved insulation board shall be fully attached to the deck with an approved mechanical fastening system. As a minimum, the amount of fasteners shall be in accordance with manufacturer's recommendation for FM I-90 system. Otherwise, a minimum of one fastener per two square feet shall be installed.
 - 2. Filler pieces of insulation require at least two fasteners per piece if size of insulation is less than four square feet.
 - 3. Spacing pattern of fasteners shall be as per manufacturer's recommendations to meet the FM requirements. Placement of any fastener from the edge of insulation board shall be a minimum of three inches, and a maximum of six (6) inches.
 - 4. Minimum penetration into deck shall be as recommended by the fastener manufacturer. There is a one (1) inch minimum for metal, wood and structural concrete decks were not specified by the manufacturer. For gypsum and cement-wood fiber decks, penetration shall be determined from pull-out test results with a minimum penetration of one and one-half (1 ½) inches.
- B. Attachment with Insulation Adhesive
 - 1. Ensure all surfaces are clean, dry, free of dirt, debris, oils, loose ore embedded gravel, unadhered coatings, deteriorated membrane and other contaminants that may inhibit adhesion.

2. Apply insulation adhesive directly to the substrate using a ribbon pattern with one quarter to one half (1/4-1/2) inch wide beads 12 inches o.c., using either the manual applicator or an automatic applicator, at a rate of one (1) gallon per one hundred (150) square feet per cartridge.
3. Immediately place insulation boards into wet adhesive. Do not slide boards into place. Do not allow the adhesive to skin over before installing insulation boards.
4. Briefly step each board into place to ensure contact with the adhesive. Substrates with irregular surfaces may prevent the insulation board from making positive contact with the adhesive. Relief cuts or temporary weights may be required to ensure proper contact.
5. All boards shall be cut and fitted where the roof deck intersects a vertical surface. The boards shall be cut to fit a minimum of one quarter (1/4) inch away from the vertical surface.
6. Weigh down all boards until foam ceases rising.
7. Approved coverboards to be installed over the top layer of insulation.

3.3 CLEANING

- A. Remove debris and cartons from the roof deck. Leave insulation clean and dry, ready to receive roofing membrane.

3.4 CONSTRUCTION WASTE MANAGEMENT

- A. Remove and properly dispose of waste products generated during installation. Comply with requirements of authorities having jurisdiction.

END OF SECTION 07 22 00

SECTION 07 41 13

METAL ROOF PANELS

PART 1 – GENERAL

1.1 SECTION INCLUDES

- A. Standing seam metal roofing system.
- B. Metal roofing edge metal and flashing.
- C. Metal roofing accessories.

1.2 RELATED SECTIONS

- A. Section 07 22 00 – Roof Deck, Insulation and Coverboard.
- B. Section 07 62 00 – Sheet Metal Flashing and Trim.
- C. Section 07 72 53 – Mechanically Attached Snow Retention System

1.3 REFERENCES

- A. ASTM A 240 - Standard Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and for General Applications.
- B. ASTM A 653/A 653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
- C. ASTM A 792/A 792M - Standard Specification for Steel Sheet, 55% Aluminum-Zinc Alloy-Coated by the Hot-Dip Process.
- D. ASTM A 875 - Standard Specification for Steel Sheet, Zinc-5 % Aluminum Alloy-Coated by the Hot-Dip Process
- E. ASTM B 101 - Standard Specification for Lead-Coated Copper Sheet and Strip for Building Construction.
- F. ASTM B 209 - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate.
- G. ASTM B 370 - Standard Specification for Copper Sheet and Strip for Building Construction.

- H. ASTM D 226 - Standard Specification for Asphalt-Saturated Organic Felt Used in Roofing and Waterproofing.
- I. ASTM D 1056 - Standard Specification for Flexible Cellular Materials - Sponge or Expanded Rubber.
- J. ASTM D 2178 - Standard Specification for Asphalt Glass Felt Used in Roofing and Waterproofing.
- K. ASTM D 3575 - Standard Test Methods for Flexible Cellular Materials made from Olefin Polymers.
- L. ASTM E 84 - Standard Test for Surface Burning Characteristics of Building Materials.
- M. ASTM E 283 - Standard Test Method for Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen.
- N. ASTM E 331 - Standard Test Method for Water Penetration of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference.
- O. ASTM E 1592 - Standard Test Method for Structural Performance of Sheet Metal Roof and Siding Systems by Uniform Static Air Pressure Difference.
- P. ASTM E 1646 - Standard Test Method for Water Penetration of Exterior Metal Roof Panel Systems by Uniform Static Air Pressure Difference.
- Q. ASTM E 1680 - Standard Test Method for Rate of Air Leakage Through Exterior Metal Roof Panel Systems.
- R. ASTM E 2140 - Standard Test Method for Water Penetration of Metal Roof Panel Systems by Static Water Pressure Head.
- S. AAMA 501.1 - Standard Test Method for Water Penetration of Windows, Curtain Walls and Doors Using Dynamic Pressure.
- T. ASCE 7 - Minimum Design Loads for Buildings and Other Structures.
- U. FM 4470 Approval Standard for Class 1 Panel Roofs.
- V. FM 4471 - Class 1 Panel Roof; Factory Mutual Research Corporation.
- W. UL 263 - Fire Tests of Building Constructions and Materials.
- X. UL 580 - Standard for Tests for Uplift Resistance of Roof Assemblies.

- Y. UL 790 - Standard Test Methods for Fire Tests of Roof Coverings.
- Z. UL 1897 - Uplift Test for Roof Covering Systems.
- AA. ICC-ES AC166 - Test Procedure for Wind Driven Rain Resistance of Metal Roof Coverings.
- BB. SMACNA - Owner's Representative Sheet Metal Manual.
- CC. National Coil Coating Association (NCCA)
- DD. NRCA - The NRCA Roofing and Waterproofing Manual.

1.4 DESIGN / PERFORMANCE REQUIREMENTS

- A. Standing Seam Roofing System: R-Mer Span
 - 1. Thermal Expansion and Contraction:
 - a. Completed metal roofing and flashing systems shall be capable of withstanding expansion and contraction of components caused by changes in temperature without buckling, producing excess stress on structure, anchors or fasteners, or reducing performance ability.
 - b. Design temperature differential shall be not less than 200 degrees F.
 - c. Interface between panel and clip shall provide for unlimited thermal movement in each direction along the longitudinal direction.
 - d. Location of metal roofing rigid connector shall be at roof ridge unless otherwise approved by the Project Owner's Representative. Metal ridge connectors may require design as per job conditions by specified manufacturer.
 - 2. Uniform Wind Load Capacity:
 - a. Installed roof system shall withstand negative (uplift) design wind loading pressures complying with the following criteria.
 - 1) Design Code: ASCE 7, Method 2 for Components and Cladding.
 - 2) Safety Factor: 1.67 after any load reduction or material stress increase.
 - 3) Category ___ Building with an Importance Factor of ___.
 - 4) Wind Speed: ___ mph.
 - 5) Exposure Category: ___.
 - 6) Design Roof Height: ___ feet.
 - 7) Minimum Building Width: ___ feet.
 - 8) Roof Pitch: ___ inches per foot.
 - 9) Roof Area Design Uplift Pressure:
 - a) Zone 1 - Field of roof ___ psf.
 - b) Zone 2 - Eaves, ridges, hips, and rakes ___ psf.
 - c) Zone 3 - Corners ___ psf.
 - 3. ASTM E 1646: Static pressure water infiltration (roof panels):

- a. Pressure Result:
 - 1) 5 Gal. /Hr. per S.F. and Static No Leakage
 - 2) Pressure of 20.0 Psf for 15 minutes
4. Capacities for gauge, span or loading other than those tested may be determined by interpolation of test results within the range of test data. Extrapolations for conditions outside test range are not acceptable.
5. Water penetration (dynamic pressure): No water penetration, other than condensation, when exposed to dynamic rain and 70 mph wind velocities for not less than five minutes duration, when tested in accord with principles of AAMA 501.1.
6. Installed roof system assembly shall show that it can resist the calculated roof pressure in accordance with the test results of TAS 125.

1.5 SUBMITTALS

- A. Submit under provisions of Division 1.
- B. Product Data: Submit product data, test reports, and certifications in accordance with quality assurance and performance requirements specified herein.
- C. Design Loads: Submit manufacturer's minimum design load calculations according to ASCE 7, Method 2 for Components and Cladding. In no case shall the design loads be taken to be less than those specified herein.
- D. Dead Load Evaluation: Provide documentation from a licensed structural engineer of a structural evaluation of the roof structure and its suitability for the new imposed roofing loads.
- E. Shop Drawings: Prepared specifically for this project; showing dimensions of metal roofing and accessories, fastening details and connections and interface with other products.
- F. Selection Samples: For each finished product specified, two complete sets of samples representing the manufacturer's full range of available colors and textures.
- G. Closeout Submittals: Provide manufacturer's maintenance instructions that include recommendations for periodic inspection and maintenance of all completed roofing work. Provide product warranty executed by the manufacturer. Assist Owner in preparation and submission of roof installation acceptance certification as may be necessary in connection with fire and extended coverage insurance on roofing and associated work.
- H. Test Reports: Submit test reports, prepared by an independent testing agency, for all standing seam and metal roofing applications.

1.6 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Manufacturer shall have in place a documented, standardized quality control program such as ISO-9001 approval.
- B. Installer Qualifications: Certified and approved installer of the sheet metal roofing manufacturer.
- C. Source Limitations: Obtain all components of the roof system from a single manufacturer. Secondary products that are required shall be recommended and approved in writing by the roofing systems manufacturer. Upon request of the owner, submit Manufacturer's written approval of secondary components in list form, signed by an authorized agent of the manufacturer.
- D. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
 - 1. Finish areas designated by the Owner's Representative.
 - 2. Do not proceed with remaining work until workmanship, color, and sheen are approved by the Owner's Representative.
 - 3. Refinish mock-up area as required to produce acceptable work.

1.7 PRE-INSTALLATION MEETINGS

- A. Convene a pre-roofing conference approximately two weeks before scheduled commencement of roofing system installation and associated work.
- B. Require attendance of installers of deck or substrate construction to receive roofing, installers of rooftop units and other work in and around roofing which must precede or follow roofing work including mechanical work, Owner's Representative, Owner, roofing system manufacturer's representative.
- C. Objectives include:
 - 1. Review foreseeable methods and procedures related to roofing work, including set up and mobilization areas for stored material and work area.
 - 2. Tour representative areas of roofing substrates, inspect and discuss condition of substrate, roof drains, curbs, penetrations and other preparatory work.
 - 3. Review structural loading limitations of the deck and inspect the deck for loss of flatness and for required attachment.
 - 4. Review roofing system requirements, Drawings, Specifications and other Contract Documents.
 - 5. Review and finalize schedule related to roofing work and verify availability of materials, installer's personnel, equipment and facilities needed to make progress and avoid delays.
 - 6. Review required inspection, testing, certifying procedures.
 - 7. Review weather and forecasted weather conditions and procedures for coping with unfavorable conditions, including possibility of temporary roofing.
 - 8. Record conference including decisions and agreements reached. Furnish a

copy of records to each party attending.

1.8 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact.
- B. Store materials protected from exposure to harmful environmental conditions and at temperature and humidity conditions recommended by the manufacturer.
 - 1. Store materials above ground, on skids.
 - 2. Protect material with waterproof covering and allow sufficient ventilation to prevent condensation buildup or moisture entrapment on the materials.
 - 3. Manufacturer's product crates are designed for transportation only, not intended for loading materials to the roof.

1.9 COORDINATION

- A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by the manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

1.10 PROJECT CONDITIONS

- A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by the manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

1.11 MANUFACTURERS FIELD REPRESENTATION

- A. Manufacturer's Field Representative: An authorized, full-time employee of the roof system manufacturer shall be assigned to the project to conduct field observations during the installation phase. The Manufacturer must employ a full-time representative that resides and is based out of the state of West Virginia.
- B. Regularly scheduled site observations shall be required by the manufacturer's field representative a minimum of three (3) days per week during the roofing installation period; exceptions being made for inclement weather, holidays, etc.
- C. Observation reports shall include the following:
 - 1. Written report/documentation of the installation progress at the time of the site visit to be delivered to the owner within 48 hours of the site visit.
 - 2. This report shall include documentation of any issues/question and resolution.
 - 3. This report shall include a record of directives given to the roofing contractor.
 - 4. Digital photographic documentation of the roofing progress; including documentation of specific issues and areas of concern.
 - 5. Each report shall contain project name and date/time of site visit.

- D. In addition to the progress observations, the manufacturer's representative must:
 - 1. Attend the roofing trade pre-construction meeting.
 - 2. Inspect and approve the roof substrate/deck prior to the start of roofing work.

- E. After completion of all roofing work, and prior to acceptance of the roofing installation, the manufacturer's representative shall conduct an observation to document all roofing work to be corrected as a condition of acceptance.
 - 1. Each item requiring corrective work shall be identified (including specific location) and required corrective action shall be noted.
 - 2. The final observation report must be produced in writing with photographic back-up. Marking corrective items on the roof alone shall not be acceptable.

- F. Any failure by the Owner's Representative, the Project Manager, or the roofing manufacturer's Technical Field Representative to observe, detect, pinpoint, or object to any defect or noncompliance with the requirements of the Roofing Manufacturer's requirements, the Contract Documents, the Project Specifications, the approved Shop Drawings and Engineering Data, and/or the Roofing Manufacturer's standard details – of work in progress or completed work – shall not relieve the Contractor of, or reduce, or in any way limit, his responsibility of full performance of the work required of him under the requirements of the Roofing Manufacturer, the Contract Documents, the Project Specifications, the approved Shop Drawings and Engineering Data, and/or the Roofing Manufacturer's standard details.

1.12 WARRANTY

- A. Upon completion of the work, provide the Manufacturer's written and signed 35-year NDL Warranty, warranting that, if a leak develops in the roof during the term of this warranty, due either to defective material or defective workmanship by the installing contractor, the manufacturer shall provide the Owner, at the Manufacturer's expense, with the labor and material necessary to return the defective area to a watertight condition.
 - 1. Warranty Period:
 - a. 35-year, edge to edge, no dollar limit warranty
 - 2. Installer is to guarantee all work against defects in materials and workmanship for a period indicated following final acceptance of the Work.
 - a. Warranty Period: 2 years from date of acceptance.
 - 3. The material manufacturer will provide an annual inspection for the duration of the warranty at the request of the owner at no additional charge.

PART 2 – PRODUCTS

2.1 MANUFACTURERS

- A. Basis of Design: The Garland Company, Inc.
 - 1. 3800 E. 91st St., Cleveland, OH 44105.
 - 2. Manufacturer's Representative:
 - a. Christian Reeves, CReeves@garlandco.com, 304-951-8940

- B. Basis of Design Materials, manufacturer's product designations, and/or manufacturer's names specified herein shall be regarded as the minimum standard of quality required for work of this Section. Comply with all manufacturer and contractor/fabricator quality and performance criteria specified in Part 1.

- C. The products specified are intended and the standard of quality for the products required for this project. If other products are proposed, the bidder must disclose in the attached alternate bid form the manufacturer and the products that they intend to use on the project. If no manufacturer or products are listed, the bid may be accepted only with the use of the products specified.
 - 1. Bidders will not be allowed to change materials after the bid submission date.
 - 2. If alternate products are included in the bid, the products must be equal to or exceed the products specified. Supporting technical data shall be submitted to the Owner for approval prior to the bid due date.
 - 3. In making a request for substitution, the bidder must submit all requirements listed in Division 01.
 - 4. In making a request for substitution, the bidder represents that it has:
 - a. Personally investigated the proposed product or method and determined that it is equal to or greater than the products specified.
 - b. Will provide the same guarantee for substitution as for the product and method specified.
 - c. Will coordinate installation of accepted substitution in work, making such changes as may be required for work to be completed in all respects.
 - d. Will waive all claims for additional costs related to substitution.
 - e. Cost data is complete and includes all related costs under his/her contract or other contracts, which may be affected by substitution.
 - f. Will reimburse the Owner for all redesign costs for the substitution.
 - 5. The Owner reserves the right to be the final authority on the acceptance or rejection of any or all bids, proposed alternate roofing systems or materials that have met all specified requirement criteria.
 - 6. Failure to submit a substitution package, or any portion thereof requested, will result in immediate disqualification and consideration for the particular contractor's request for manufacturer substitution.

2.2 STANDING SEAM METAL ROOFING

- A. R-Mer Span:
1. Width of Standing T-Seam Panel: 1 inch T-seam.
 - a. 18 inches.
 2. Standing Seam: 2-3/8 inch tall mechanically seamed with factory installed hot melt sealant in-seam cap. Panel/Cap is configured with a total of 4 layers of metal surrounding anchor clip.
 3. Panel Profile: Provided with minimum 1-1/2 inches wide elevated mesa's every 2 inches on center continuous throughout panel.
 - a. Slope: Open Purlins or Solid Substrate down to 1/4:12.
 4. Panel material:
 - a. Aluminum, 3105-H14 alloy, smooth as per ASTM B 209, .040-inch thickness.
 5. Flashing and flat stock material: Fabricate in profiles indicated on Drawings of same material, thickness, and finish as roof system, unless indicated otherwise.
 6. Coated Finish:
 - a. Exposed surfaces for coated panels:
 - 1) Two coat coil applied, baked-on full-strength (70% resin) fluorocarbon coating system (polyvinylidene fluoride, PVF2), applied by manufacturer's approved applicator.
 - 2) Coating system shall provide nominal 1.0 mil dry film thickness, consisting of primer and color coat.
 - b. Unexposed surfaces for coated panels shall be baked-on polyester coating with .20 to .30 dry film thickness (TDF).
 7. Accessory Components:
 - a. Anchor Clips:
 - 1) Concealed Standard Anchor Clips: Clips 16-gauge stainless steel, alloy 409 2D, 1 piece clip with projecting legs for additional panel alignment and provision for unlimited thermal movement in each direction along the longitudinal dimension.
 - 2) Two-piece clips are unacceptable.
 - 3) Sealant applied in panel cap must be isolated from clip to ensure that no sealant damage occurs from the movement of the panel during expansion and contraction.
 - 4) Clip must maintain a clearance of a minimum of 3/8 inch between panel and substrate for proper ventilation to help prevent condensation on underside of panel and eliminate the contact of panel fastener head to panel.
 - b. Gable anchor clips for:
 - 1) Standing Seam style.
 - a) Stainless steel, alloy 409 2D, minimum thickness: 16 gauge.
 - c. Fasteners:
 - 1) Concealed fasteners: Corrosion resistant steel fasteners (zinc plated, stainless steel or equal) designed to meet structural loading requirements.
 - 2) Exposed fasteners: Series 410 stainless steel fasteners or 1/8-inch diameter stainless steel waterproof rivets. All exposed fasteners

shall be factory painted to match the color of the standing seam panels.

- d. Closures: Factory precut closed cell foam meeting ASTM D 1056 or ASTM D 3575, enclosed in metal channel matching panels when used at hip, ridge, rake, and jamb.
- e. Provide all miscellaneous accessories for complete installation.

2.3 METAL ROOFING ACCESSORIES

- A. Self-Adhering, Vapor Impermeable, High-Temperature Sheet: 45-mill thick minimum, consisting of slip-resisting top surface cross-laminated to high temperature SBS-modified asphalt adhesive, with split release backing film.
 1. Maximum Temperature Rating: 250 deg F (121.11 deg C) ASTM D 1970.
 2. Low-Temperature Flexibility: Passes after testing at minus 20 deg F (29 deg C); ASTM D 1970.
 3. Seams shall be lapped in accordance with manufacturer's recommendations.
 4. Products: R-Mer Seal by The Garland Company, Inc.
- B. Sealant:
 1. Concealed Applications: Non-Curing Butyl Sealant - Schnee-Morehead, Inc. SM5430 Acryl-R, or equal.
 2. Exposed Applications: UV Resistant Tripolymer Sealant - Geocel Corporation, 2300 Tripolymer Sealant, or equal.
- C. Flashing and Trim: Formed from the same material and gauge as roof panels, pre-painted with coil coating. Provide flashing and trim as required to seal against weather and to provide finished appearance. Locations include, but are not limited to, eaves, rakes, corners, bases, framed openings, ridges, fasciae, and fillers. Finish flashing and trim with the same finish system as adjacent metal roof panels.
- D. Gutters: Formed from the same material roof panels. Match profile of gable trim, complete with end pieces, outlet tubes, and other special pieces as required. Fabricate in minimum 10-foot- (3-m-) long sections, of size and metal thickness according to SMACNA's "Architectural Sheet Metal Manual." Furnish gutter supports spaced per SMACNA's recommendation based on gauge and stretch-out, fabricated from the same metal as gutters. Provide wire ball strainers of compatible metal at outlets. Finish gutters to match metal roof panels.
 1. Gutter Hangers: External gutter supports shall be 2-inch- (50-mm-) wide x ¼-inch- (6-mm-) thick formed aluminum and shall be spaced at no greater than 36" (0.9m) on center. External supports shall be post-painted with a matching full-strength 70 percent PVDF finish and warranted by the panel manufacturer for the same term as specified for material finishes.
 2. Gutter Straps: Internal gutter straps shall be 1-inch- (25-mm-) wide x 1/8-inch- (3-mm-) thick formed aluminum and shall be spaced at no greater than 36" (0.9m) on center. Internal straps shall be post-painted with a matching full-

strength 70 percent PVDF finish and warranted by the panel manufacturer for the same term as specified for material finishes.

- E. Downspouts: Formed from the same material as roof panels. Fabricate in 10-foot- (3-m-) long sections, complete with formed elbows and offsets, of size and metal thickness according to SMACNA's "Architectural Sheet Metal Manual". Finish downspouts to match gutters.
 - 1. Downspout Brackets: Where detailed, surface mounted downspout protection guards shall be fabricated from ¼-inch- (6-mm-) thick formed aluminum and shall be post-painted with a matching full-strength 70 percent PVDF finish and warranted by the panel manufacturer for same term as specified for material finishes.
- F. Roof Curbs: Fabricated from the same material as roof panels, minimum and welded top box and integral full-length cricket. Fabricate curb sub framing of minimum 0.0598-inch- (1.5-mm-) thick, angle-, C-, or Z-shaped steel sheet. Fabricate curb and sub framing to withstand indicated loads, of size and height indicated. Finish roof curbs to match metal roof panels.
- G. Fabricated flashing, trim, gutters and downspouts: High gloss, factory painted aluminum
 - 1. Material and Thickness: 0.040" aluminum
 - 2. Color: Owner's choice of custom color
 - 3. Products: R-Mer SS Sheet Stock by The Garland Company, Inc.
- H. S-5! Snow Retention System:
 - 1. As specified in Section 07 72 53 – Mechanically Attached Snow Retention System
 - 2. To be supplied by the manufacturer of standing seam metal panel roof system as part of warrantied system.

PART 3 – EXECUTION

3.1 EXAMINATION

- A. Examine surfaces to receive metal roofing. Notify the Owner's Representative in writing of any defective conditions encountered. Starting of work shall constitute acceptance of such conditions.
- B. Structural Deck Substrate:
 - 1. Inspect the roof deck to verify deck is clean and smooth, free of depressions, waves, or projections, and properly sloped.
 - 2. Verify deck is dry and joints are solidly supported and fastened.
 - 3. Verify wood nailers are installed and correctly located. Do not use pressure-treated wood containing salt-based preservatives or materials corrosive to steel.

- C. Structural Framing Substrate:
 - 1. Verify primary and secondary framing members are installed and fastened, properly aligned and sloped.
 - 2. Verify damaged shop coatings are repaired with touch up paint.
- D. Verify roof openings, curbs, pipes, sleeves, ducts, or vents through roof are solidly set, reglets are in place, and nailing strips located.
- E. Correct defective conditions before beginning work.

3.2 UNDERLAYMENT INSTALLATION

- A. Self-Adhering Sheet Underlayment:
 - 1. Apply primer if required by the manufacturer.
 - 2. Comply with temperature restrictions of the underlayment manufacturer for installation.
 - 3. Apply over the entire roof surface, wrinkle free, in shingle fashion to shed water, and with end laps of not less than 6 inches (150 mm) staggered 24 inches (610 mm) between courses.
 - 4. Overlap side edges not less than 3-1/2 inches (90 mm). Roll laps with roller.
 - 5. Cover underlayment within 90 days.

3.3 STANDING SEAM METAL ROOF PANEL INSTALLATION

- A. Install metal roof system in conformance with the NRCA Roofing and Waterproofing Manual, SMACNA Owner's Representative Sheet Metal Manual, Manufacturers approved shop drawings and installation requirements.
- B. Manufacturer to provide panels specific to the project. Fabrication of the panels by the installing contractor is prohibited.
- C. Install all panels continuously from ridge to eave. Transverse seams are not permitted.
- D. Install underlayment and eave protection sheet underlayment as recommended by the Manufacturer.
- E. Panel lengths that exceed maximum shipping lengths shall be field rolled on equipment owned by the panel manufacturer. Seam sealant must be factory applied.
- F. Exposed fasteners, screws and/or roof mastic are unacceptable and will be rejected. System configuration only allows for exposed fasteners at panel overlap, if required, and at trim details in accordance with the Manufacturer's requirements.
- G. Where not otherwise indicated conform to SMACNA details including flashings and trim.

- H. Install sealants where indicated to clean dry surfaces only without skips or voids.
- I. Install metal edge treatment in accordance with the manufacturer's instructions and the approved shop drawings.
- J. Install metal roofing accessories in accordance with the manufacturer's instructions and the approved shop drawings.

3.4 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION 07 41 13

SECTION 07 42 66
METAL SOFFIT PANELS

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General Supplementary Conditions and Division 1 Specification Sections apply to this section.

1.2 SUMMARY

- A. This Section includes pre-formed metal wall panels with concealed fasteners, factory-finished.
- B. Related Sections:
 - 1. Section 07 41 13 – Metal Roof Panels.
 - 2. Section 07 62 00 – Sheet Metal Flashing and Trim.

1.3 REFERENCES

- A. American Society for Testing and Materials (ASTM):
 - 1. B209 Specification for Aluminum and Aluminum – Alloy Sheet and Plate
- B. Sheet Metal and Air Conditioning Contractors National Association (SMACNA):

1.4 SUBMITTALS FOR REVIEW

- A. Product Data: Include manufacturer's detailed material and system description, concealed anchor clips, sealant and closure installation instructions, and finish specifications. Indicate fastener types and spacing; and required fastener pullout values.

1.5 QUALITY ASSURANCE

- A. Installer Qualifications: Engage an Installer who has completed the Manufacturer's Approved Contractor course and is currently certified for the installation of the specified system.
- B. Source Limitations: Obtain all components from a single manufacturer. Secondary products that are required shall be recommended and approved in writing by the Manufacturer.
 - 1. Upon request of the Architect or Owner, submit Manufacturer's written approval of secondary components in list form, signed by an authorized agent of the Manufacturer.
 - 2. The manufacturer shall have direct authority and control over all fabrication of steel components as well as the raw materials used in their fabrication.
- C. Source Quality Control: Manufacturer shall have in place a documented, standardized quality control program such as ISO-9001 approval.

- D. Engage the Manufacturer's Field Representative to conduct required periodic inspections of work in progress as described herein and shall furnish written documentation of all such inspections.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Manufacturer's responsibilities:
 - 1. All panels shall be shipped from the manufacturer with polystyrene or similar cushioned packaging material separating the individual panels to minimize flexing, stressing, scratching or otherwise damaging the material during transit to the job.
 - 2. Fully cover panels with tarpaulins or similar protective cover during transit to prevent dirt and debris from coming in contact with the finished goods.
- B. Installer's responsibilities:
 - 1. Stack pre-finished materials to prevent twisting, bending, abrasion and denting and elevate one end to facilitate moisture run-off.
 - 2. Protect moisture-sensitive materials and water-based from the weather.
 - 3. Inspect materials upon delivery. Reject and remove physically damaged or marred material from project site.

1.7 PROJECT CONDITIONS

- A. Determine that work of other trades will not hamper or conflict with necessary fabrication and storage and protection requirements for wall panel systems.
 - 1. Protection:
 - a. Protect completed work from subsequent construction operations. Comply with Manufacturer's recommendations.
 - b. Do not encumber the site with stored materials or equipment.

1.8 MANUFACTURER'S INSPECTIONS

- A. When the project is in progress, the system manufacturer will provide the following:
 - 1. Keep the Architect or Owner informed as to the progress and quality of the work as observed.
 - 2. Provide periodic job site inspections.
 - 3. Report to the Architect in writing any failure or refusal of the Contract to correct unacceptable practices called to the Contractor's attention.
 - 4. Confirm after completion that the manufacturer has observed no application procedures in conflict with the specifications other than those that may have been previously reported and corrected.

PART 2 – PRODUCTS

2.1 PRODUCTS, GENERAL

- A. Basis of Design: Materials, manufacturer's product designations, and/or manufacturer's names specified herein shall be regarded as the minimum standard of

quality required for work of this Section. Comply with all manufacturer and contractor /fabricator quality and performance criteria specified in Part 1.

2.2 ACCEPTABLE MANUFACTURERS

- A. The design is based upon the R-MER Soffit system engineered and manufactured by

The Garland Company
3800 East 91st Street
Cleveland, Ohio 44105
Telephone: (800) 762-8225
Website: www.garlandco.com

2.3 SOFFIT PANEL SYSTEM

- A. Materials

1. Panel material: .032" thickness aluminum, 3105-H14 alloy, smooth as per ASTM B209-96.
2. Flashing and flat stock material. Fabricate from .032" thick aluminum in profiles indicated on drawings of the same material and finish as soffit system, unless indicated otherwise.

- B. Finish on surfaces:

1. Exposed surfaces for coated panels:
 - a. Two coat coil applied, baked-on full-strength (70% resin) fluorocarbon coating system (polyvinylidene fluoride, PVF2), applied by manufacturer's approved applicator.
 - b. Coating system shall provide nominal one point zero (1.0) mil dry film thickness, consisting of primer and color coat.
2. Unexposed surfaces for coated panels shall be baked-on polyester coating with .20 - .30 dry film thickness (TDF).

- C. Characteristics:

1. Fabrication: Panels shall be factory roll-formed from the specified metal. Field rolled panels will not be allowed.
2. Configuration: Interlocking flush/flat seams incorporating concealed screw type fastener. Concealed clip systems are not acceptable.
3. Panel width: twelve (12) inch nominal.
4. Panel lengths: Full length without joints to the extent as is practical. For lengths which exceed twenty-five (25) feet, shorter panels may be butted end-to-end (no overlap). End joints shall be staggered.
5. Panels shall have one (1) V-groove mechanically formed reveal at the center of the pan.
6. All panels shall be solid (non-vented).

- D. Accessories:

1. Fasteners:

- a. Concealed fasteners: Corrosion resistant steel screws, #10 x 1" long, pancake head, Phillips drive. Use self-drilling, self-tapping for metal substrate or A-point for plywood substrate.
 - b. Exposed fasteners: Series 410 stainless steel screws or one eighth (1/8) inch diameter stainless steel waterproof rivets. All exposed fasteners shall be factory painted to match the color of the soffit panels.
2. Provide all miscellaneous accessories for complete installation.

2.4 ACCESSORY PRODUCTS

- A. Sealant:
 1. Acceptable product:
 - a. Concealed Application: PTI-707 or Bostik Chem-Caulk butyl sealant or equal.
 - b. Exposed Application: General Electric Co., SILGLAZE II 2800 or equal.

2.5 FABRICATION

- A. Shop fabricate metal panels and flashing components to the maximum extent possible, forming metal work with clear sharp, straight, and uniform bends and rises. Hem exposed edges of flashings.
- B. Form flashing components from full single width sheets in minimum ten (10) feet zero (0) inch sections. Provide shop fabricated, mitered corners, joined using closed end pop rivets and joint sealant.
- C. Fabricate panels and related sheet metal work in accordance with approved shop drawings and applicable standards.

PART 3 – EXECUTION

3.1 PREPARATION

- A. Inspection: Examine the alignment and placement of the building structure and substrate. Correct any objectionable warp, waves or buckles in the substrate before proceeding with installation of the pre-formed metal panels.

3.2 INSTALLATION

- A. All details will be shown on manufacturer's shop drawings to successful bidder; install soffit and flashings in accordance with approved shop drawings and manufacturer's product data, within specified erection tolerances.
- B. Directly over the completed soffit substrate, install metal soffit panels. All panels will be fastened into the structural substrate with screw type fasteners at twenty-four (24) inches o.c. maximum spacing along each panel seam.
- C. Seal laps and joints in accordance with roofing system manufacturer's product data.

- D. Coordinate flashing and sheet metal work to provide weathertight conditions at soffit terminations. Fabricate and install in accordance with standard of SMACNA Manual.
- E. The installed system shall be true to line and place and free of dents, and physical defects. In light gauge panels with wide flat surfaces, some oil canning may be present. Oil canning does not affect the finish or structural integrity of the panel and is therefore not cause for rejection.
- F. Form joints in linear sheet metal to allow for one quarter (1/4) inch minimum expansion at twenty (20) feet zero (0) inch on-center maximum and eight (8) feet zero (0) inch from corners.
- G. At joints in linear sheet metal items, set sheet metal items in two (2) one quarter (1/4) inch beads of butyl sealant. Extend sealant over all metal surfaces. Mate components for positive seal. Allow no sealant to migrate onto exposed surfaces.
- H. Remove damaged work and replace it with new, undamaged components.
- I. Touch up exposed fasteners using paint furnished by soffit panel manufacturer and matching exposed panel surface finish.
- J. Clean exposed surfaces of soffit and accessories after completion of installation. Leave in clean condition at the date of substantial completion. Touch up minor abrasions and scratches in finish.

3.3 CLEANING

- A. Clean installed work in accordance with the manufacturer's instructions.
- B. Replace damaged work that cannot be restored by normal cleaning methods.

3.4 CONSTRUCTION WASTE MANAGEMENT

- A. Remove and properly dispose of waste products generated during construction. Comply with requirements of authorities having jurisdiction.

3.5 FINAL INSPECTION

- A. At completion of installation and associated work, meet with Contractor, Architect, installer, installer or associated work, Owner, system manufacturer's representative, and other representative directly concerned with performance of the system.
- B. Inspect work and flashing of penetrations, walls, curbs and other equipment. List all items requiring correction or completion and furnish a copy of the list to each party in attendance.
- C. Repair or replace deteriorated or defective work found at time above inspection as required to produce an installation which is free of damage and deterioration at time of Substantial Completion and according to warranty requirements.

- D. Notify the Owner upon completion of corrections.
- E. Following the final inspection, provide written notice of acceptance of the installation from the system manufacturer.
- F. Immediately correct roof leakage during construction. If the Contractor does not respond within twenty four (24) hours, the Owner will exercise to correct the Work under the terms of the Conditions of the Contract.

END OF SECTION

SECTION 07 62 00

EDGE METAL, SHEET METAL FLASHING, AND TRIM

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including the Conditions of the Contract and Division 01 Specification Sections apply to this section.

1.2 SUMMARY

- A. Provide all labor, equipment, and materials to fabricate and install the following.
 - 1. Fascia, scuppers and trim
 - 2. Coping cap at parapets
 - 3. Expansion joint and area divider covers
 - 4. Gutters, scuppers and downspouts
- B. Related Sections:
 - 1. Section 07 22 00 – Roof Deck, Insulation and Coverboards
 - 2. Section 07 41 13 – Standing Seam Metal Roofing

1.3 REFERENCES

- A. American Society for Testing and Materials (ASTM)
 - 1. ASTM A653 Standard Specification for Steel Sheet, Zinc-Coated (galvanized) or Zinc-Iron Alloy-Coated (galvannealed) by the Hot-Dip Process.
 - 2. ASTM B209 Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate.
- B. American National Standards Institute and Single Ply Roofing Institute (ANSI/SPRI)
 - 1. ANSI/SPRI ES-1 Testing and Certification Listing of Shop Fabricated Edge Metal
- C. Sheet Metal and Air Conditioning Contractors National Association (SMACNA)
 - 1. 1993 Edition Architectural Sheet Metal Manual
- D. National Roofing Contractors Association (NRCA):
 - 1. Roofing and Waterproofing Manual
- E. Warnock Hersey International, Inc., Middleton, WI (WH)
- F. Factory Mutual Research Corporation (FMRC)

1. FM 1-49 Loss Prevention Data Sheet
- G. Underwriters Laboratories (UL)
- H. American Society of Civil Engineers (ASCE)
1. ASCE 7 Minimum Design Loads for Buildings and Other Structures

1.4 SUBMITTALS FOR REVIEW

- A. Product Data:
1. Provide manufacturer's specification data sheets for each product.
 2. Metal material characteristics and installation recommendations.
 3. Submit color charts prior to material ordering and/or fabrication so that equivalent colors to those specified can be approved.
- B. Shop Drawings
1. For manufactured and ANSI/SPRI ES-1 compliant shops fabricated gravel stops, fascia, snap-on coping, scuppers, and all other sheet metal fabrications.
 2. Indicate material profile, jointing details, fastening methods, flashing, terminations, and installation details.
 3. Indicate type, gauge and finish of metal
- C. Provide approval letters from metal manufacturers for use of their metal within this particular roofing system type.

1.5 SUBMITTALS FOR INFORMATION

- A. Design Loads: Any material submitted as equal to the specified material must be accompanied by a report signed and sealed by a professional engineer licensed in the state in which the installation is to take place. This report shall show that the submitted equal meets the wind uplift and perimeter attachment requirements according to ASCE 7 and that the submitted equal edge metal system is compliant with the ANSI/SPRI ES-1 standard.
- B. Factory Mutual Research Corporation's (FMRC) wind uplift resistance classification: The roof perimeter flashing shall conform to the requirements as defined by the FMRC Loss Prevention Data Sheet 1-49.
- C. A letter from the manufacturing company certifying that the materials furnished for this project are the same as represented in tests and supporting data.

1.6 CONTRACT CLOSEOUT SUBMITTALS

- A. Special Project Warranty: Provide specified warranty for the Project, executed by the authorized agent of the Manufacturer.

- B. Roofing Maintenance Instructions. Provide a manual of manufacturer's recommendations for maintenance of installed roofing systems.
- C. Insurance Certification: Assist Owner in preparation and submission of roof installation acceptance certification as may be necessary in connection with fire and extended coverage insurance on roofing and associated work.

1.7 QUALITY ASSURANCE

- A. Engage an experienced roofing contractor specializing in sheet metal flashing work with a minimum of five (5) years' experience.
- B. Maintain a full-time supervisor/foreman who is on the jobsite at all times during installation. Foreman must have a minimum of five (5) years' experience with the installation of a similar system to that specified.
- C. Source Limitation: Obtain components from a single manufacturer. Secondary products which cannot be supplied by the specified manufacturer shall be approved in writing by the primary manufacturer prior to bidding.
- D. Upon request fabricator/installer shall submit work experience and evidence of financial responsibility. The Owner's representative reserves the right to inspect fabrication facilities in determining qualifications.

1.8 QUALITY ASSURANCE

- A. Reference Standards
 - 1. Comply with details and recommendations of SMACNA Manual for workmanship, methods of joining, anchorage, provisions for expansion, etc.
 - 2. Factory Mutual Loss Prevention Data Sheet 1-49 windstorm resistance 1-90.

1.9 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials in manufacturer's original, unopened containers or packages with labels intact and legible.
- B. Stack pre-formed and pre-finished material to prevent twisting, bending, or abrasion, and to provide ventilation. Slope metal sheets to ensure drainage.
- C. Prevent contact with materials which may cause discoloration or staining.

1.10 PROJECT CONDITIONS

- A. Determine that work of other trades will not hamper or conflict with necessary fabrication and storage requirements for pre-formed metal edge systems.

1.11 DESIGN AND PERFORMANCE CRITERIA

- A. Thermal expansion and contraction:
 - 1. Completed metal edge flashing system, shall be capable of withstanding expansion and contraction of components caused by changes in temperature without buckling, producing excess stress on structure, anchors or fasteners, or reducing performance ability.
- B. Wind Uplift Resistance in compliance with ANSI SPRI ES-1 testing protocol.

1.12 MANUFACTURER'S FIELD REPRESENTATION

- A. Manufacturer's Field Representative: An authorized, full-time employee of the roof system manufacturer shall be assigned to the project to conduct field observations during the installation phase. The Manufacturer must employ a full-time representative that resides and is based out of the state of West Virginia.
- B. Regularly scheduled site observations shall be required by the manufacturer's field representative a minimum of two (2) days per week during the roofing installation period; exceptions being made for inclement weather, holidays, etc.
- C. Observation reports shall include the following:
 - 1. Written report/documentation of the installation progress at the time of the site visit to be delivered to the owner within 48 hours of the site visit.
 - 2. This report shall include documentation of any issues/question and resolution.
 - 3. This report shall include a record of directives given to the roofing contractor.
 - 4. Digital photographic documentation of the roofing progress; including documentation of specific issues and areas of concern.
 - 5. Each report shall contain project name and date/time of site visit.
- D. In addition to the progress observations, the manufacturer's representative must:
 - 1. Attend the roofing trade pre-construction meeting.
 - 2. Inspect and approve the roof substrate/deck prior to the start of roofing work.
- E. After completion of all roofing work, and prior to acceptance of the roofing installation, the manufacturer's representative shall conduct an observation to document all roofing work to be corrected as a condition of acceptance.

1. Each item requiring corrective work shall be identified (including specific location) and required corrective action shall be noted.
 2. The final observation report must be produced in writing with photographic back-up. Marking corrective items on the roof alone shall not be acceptable.
- F. Any failure by the Owner's Representative, the Project Manager, or the roofing manufacturer's Technical Field Representative to observe, detect, pinpoint, or object to any defect or noncompliance with the requirements of the Roofing Manufacturer's requirements, the Contract Documents, the Project Specifications, the approved Shop Drawings and Engineering Data, and/or the Roofing Manufacturer's standard details – of work in progress or completed work – shall not relieve the Contractor of, or reduce, or in any way limit, his responsibility of full performance of the work required of him under the requirements of the Roofing Manufacturer, the Contract Documents, the Project Specifications, the approved Shop Drawings and Engineering Data, and/or the Roofing Manufacturer's standard details.

1.13 WARRANTIES

- A. The owner shall receive one (1) warranty from the manufacturer of roofing materials covering all of the following criteria. Multiple warranties are not acceptable.
1. Pre-finished metal material shall require a written thirty (30)- year non-prorated warranty covering fade, chalking and film integrity. The material shall not show a color change greater than 5 NBS color units per ASTM D2244 or chalking excess of 8 units per ASTM D659. If either occurs material shall be replaced per warranty, at no cost to the Owner.
 2. Installing contractors shall certify that the edge metal system has been installed per the manufacturer's printed details and specifications.
- B. Contractor's Warranty
1. The Contractor shall provide the Owner with a notarized written warranty assuring that all sheet metal work including caulking and fasteners to be watertight and secure for a period of two (2) years from the date of final acceptance of the building. Warranty shall include all materials and workmanship required to repair any leaks that develop and make good any damage to other work or equipment caused by such leaks or the repairs thereof.

PART 2 – PRODUCTS

2.1 APPROVED EQUIVALENT

- A. Substitutions: Products proposed as equal to the products specified in this Section shall be submitted in accordance with Bidding Requirements and Division 01 provisions.
- B. Equivalency of performance criteria, warranty terms, submittal procedures, and contractual terms will constitute the basis of acceptance.
- C. The Owner's decision regarding substitutions will be considered final. Unauthorized substitutions will be rejected.

2.2 MATERIALS

- A. Materials: Minimum gauge of steel or thickness of Aluminum to be specified in accordance with Architectural Sheet Metal Manual, Sheet Metal and Air Conditioning Contractor's National Association, Inc. recommendations.
- B. Snap-On Coping System
 - 1. Coping Cap Cover and Splice Plate
 - a. Aluminum, ASTM B209, alloy 3105-H14, in thickness of .040" nom., kynar finish.
 - 2. Coping Chairs
 - a. Zinc-coated steel, ASTM A653, coating designation G-90, in thickness of 0.0635 nom./ 16 gauge, 36" to 48" by coil length, chemically treated, commercial or lock-forming quality.
- C. Shop Fabricated Counterflashing
 - 1. Aluminum, ASTM B209, alloy 3105-H14, in thickness of .040" nom., kynar finish
- D. Shop fabricated pitch pans.
 - 1. Copper or Stainless Steel as specified below.
 - 2. All joints to be fully welded/soldered. Use of rivets, screws or fasteners will not be permitted.
- E. Shop fabricated gutters, scuppers, and downspouts
 - 1. Aluminum, ASTM B209, alloy 3105-H14, in thickness of .040" nom.
- F. Termination Bar: 1/8" thick, 1" wide extruded aluminum bar with flat profile, factory punched holes spaced 6-inches on center.
- G. Miscellaneous Metals and Flashings
 - 1. Sheet Lead: FS QQ-L-201, Grade B; 2-1/2 pounds per square foot, 0.0391-inches thick minimum used for sanitary vent flashing.
 - 2. Stainless Steel Sheet: Type 302/304, ASTM A167, 26 gage, annealed except dead soft where fully concealed by other work, 2D (dull) finish.

3. Copper Sheet: ASTM B370, 16 oz. (0.0216), temper H00 (cold-rolled).
4. Lead-Coated Copper Sheet: ASTM B101. Type I, Class A (12-15 1 lb. of lead coating per 100 sq. ft.), 17.1 oz. (0.022").
5. Zinc Alloy Sheet: Zinc with 0.6% copper and 0.14% titanium; 0.27" thick (21 gauge); standard (soft) temper, mil finish.

H. Finishes

1. Exposed surfaces for coated panels:
 - a. Steel Finishes: fluorocarbon finish. Epoxy primer baked both sides, .2-.25 mils thickness as approved by the finish coat manufacturer. Weathering finishes as referred by National Coil Coaters Association (NCCA).
 - b. Color: Owner's choice of custom color.
2. Exposed and unexposed surfaces for mill finish flashing, fascia, and coping cap, shall be as shipped from the mill.

2.3 RELATED MATERIALS AND ACCESSORIES

A. Fasteners:

1. Corrosion resistant screw fastener as recommended by metal manufacturer. Finish exposed fasteners the same as flashing metal.
2. Washers: Steel washers with bonded rubber sealing gasket.
3. Screws: Self-tapping sheet metal type compatible with material fastened.

B. Self-Adhering, Vapor Impermeable, High-Temperature Sheet: 45-mil thick minimum, consisting of slip-resisting top surface cross-laminated to high temperature SBS-modified asphalt adhesive, with split release backing film.

1. Maximum Temperature Rating: 250 deg F (121.11 deg C) ASTM D 1970.
2. Low-Temperature Flexibility: Passes after testing at minus 20 deg F (29 deg C); ASTM D 1970.
3. Seams shall be lapped in accordance with manufacturer's recommendations.

C. Metal Primer: Zinc chromate type.

D. Plastic Cement: ASTM D 4586

E. Sealant: Specified in Section 07900 or on drawings.

PART 3 – EXECUTION

3.1 PROTECTION

- A. Isolate metal products from dissimilar metals, masonry or concrete with bituminous paint, tape, or slip sheet. Use gasketed fasteners where required to prevent corrosive reactions.

3.2 GENERAL

- A. Secure fascia to wood nailers at the bottom edge with a continuous cleat.
- B. Fastening of metal to walls and wood blocking shall comply with building code standards.
- C. All accessories or other items essential to the completeness of sheet metal installation, whether specifically indicated or not, shall be provided and of the same material as the item to which applied.
- D. Allow sufficient clearances for expansion and contraction of linear metal components. Secure metal using fasteners as required by the system. Exposed face fastening will be rejected.

3.3 INSPECTION

- A. Verify that curbs are solidly set and nailing strips located.
- B. Perform field measurements prior to fabrication.
- C. Verify that the substrate is dry, clean and free of foreign matter.
- D. Commencement of installation shall be considered acceptance of existing conditions.

3.4 MANUFACTURED SHEET METAL SYSTEMS

- A. Furnish and install manufactured fascia and coping cap systems in strict accordance with manufacturer's printed instructions.
- B. Provide factory-fabricated accessories including, but not limited to, fascia extenders, miters, scuppers, joint covers, etc. refer to Source limitation provision in Part 1.

3.5 SHOP-FABRICATED SHEET METAL

- A. Metal work shall be shop fabricated to configurations and forms in accordance with recognized sheet metal practices.
- B. Hem exposed edges.
- C. Angle bottom edges of exposed vertical surfaces to form a drip.

- D. Lap corners with adjoining pieces fastened and set in sealant.
- E. Form joints for gravel stop fascia system, coping cap with a 3/8" opening between sections. Back the opening with an internal drainage plate formed to the profile of the fascia piece.
- F. Install sheet metal to comply with referenced ANSI/SPRI, SMACNA and NRCA standards.

3.6 FLASHING MEMBRANE INSTALLATION

A. Snap-On Coping Cap Detail

1. Install Miters first.
2. Position base flashing of the Built-Up and/or Modified Roofing membrane over the wall edge covering nailers completely, fastening eight (8) inches on center. Install membrane and cap sheet with proper material and procedure according to manufacturer's recommendations.
3. Install minimum sixteen (16) gauge, sixteen (16) inch long by specified widths. anchor chair at [Contact Manufacturer's Representative] feet on center.
4. Install a six (6) inch wide splice plate by centering over sixteen (16) inch long by specified width anchor chair. Apply two beads of sealant to either side of the splice plate's center. Approximately two (2) inches from the coping cap joint. Install Coping Cap by hooking outside hem of coping on the outside face of the anchor chair. Press downward on the inside edge of coping until "snap" occurs and hem is engaged on the entire chair.

B. Shop Fabricated Coping Cap

1. Copings shall be provided with factory fabricated welded watertight coping accessories such as miters, transitions, end caps, etc. and finished to match the coping system. No exposed fasteners will be accepted throughout the entire project.
2. Accessories: Joint covers, corners, supports, strip flashing at joinings, fastening, and other accessories shall be included.
3. Install continuous cleat fasten 6" O.C.
4. Install new coping cap hooked to continuous cleat.

C. Surface/Slip Mounted Counterflashing

1. Counterflashing shall be provided with watertight accessories such as miters, transitions, end caps, etc. and finished to match counterflashing.
2. Accessories: Joint covers, corners, fasteners, strip flashing at joinings, fastening, and other accessories shall be included.
3. Secure termination bar through both base and cap flashing and into wall every 8" O.C., caulk top of termination bar.

4. Secure new counterflashing directly above flashing termination bar every 24" O.C., caulk top of counterflashing if counterflashing is not slipped beneath existing coping.
- D. Reglet Mounted Counterflashing
1. Reglet shall be provided with watertight accessories such as miters, transitions, end caps, etc. and finished to match.
 2. Accessories: Joint covers, corners, fasteners, strip flashing at joinings, fastening, and other accessories shall be included.
 3. Cut reglets in masonry one joint above flashing.
 4. Secure termination bar through both base and cap flashing and into wall every 8" O.C., caulk top of termination bar.
 5. Secure reglet counterflashing with expansion fasteners and caulk reglet opening.
- E. Roof Drain
1. Prime lead/copper at a rate of 100 square feet per gallon and allowed to dry.
 2. Set lead/copper flashing (30" square minimum) in a 1/4" bed of mastic.
 3. Install clamping ring and strainer to ensure all plies are under the clamping ring.
- F. Plumbing Stack with lead flashing
1. Prime flange and sleeve at a rate of 100 square feet per gallon and allow to dry.
 2. Install properly sized sleeves in a 1/4" bed of elastomeric mastic.
 3. Turn the sleeve a minimum of 1" down inside the stack.
 4. Caulk intersection of the membrane and flange with elastomeric sealant.

3.7 CLEANING

- A. Clean installed work in accordance with the manufacturer's instructions.
- B. Replace damaged work that cannot be restored by normal cleaning methods.

3.8 CONSTRUCTION WASTE MANAGEMENT

- A. Remove and properly dispose of waste products generated. Comply with requirements of authorities having jurisdiction.

3.9 FINAL INSPECTION

- A. At completion of installation and associated work, meet with Contractor, installer, installer of associated work, Owner, roofing system manufacturer's representative, and other representatives directly concerned with performance of roofing system.

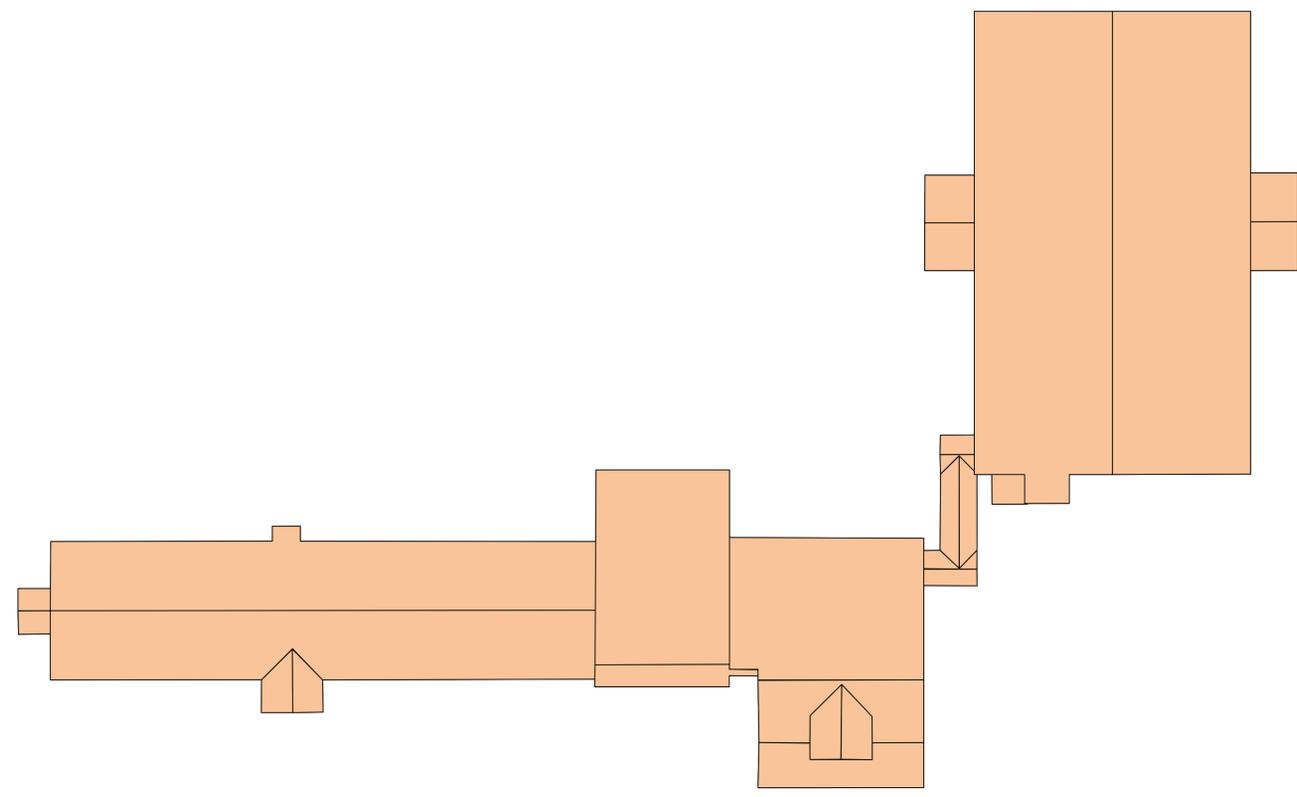
- B. Inspect work and flashing of roof penetrations, walls, curbs, and other equipment. List all items requiring correction or completion and furnish a copy of the list to each party in attendance.
- C. Repair or replace deteriorated or defective work found at time above inspection as required to produce an installation which is free of damage and deterioration at time of Substantial Completion and according to warranty requirements.
- D. Notify Owner upon completion of corrections.
- E. Immediately correct roof leakage during construction. If the Contractor does not respond within twenty-four (24) hours, the Owner will exercise rights to correct the Work under the terms of the Conditions of the Contract.

END OF SECTION 07 62 00

SITE MAP



 ROOF AREAS IN PROJECT SCOPE



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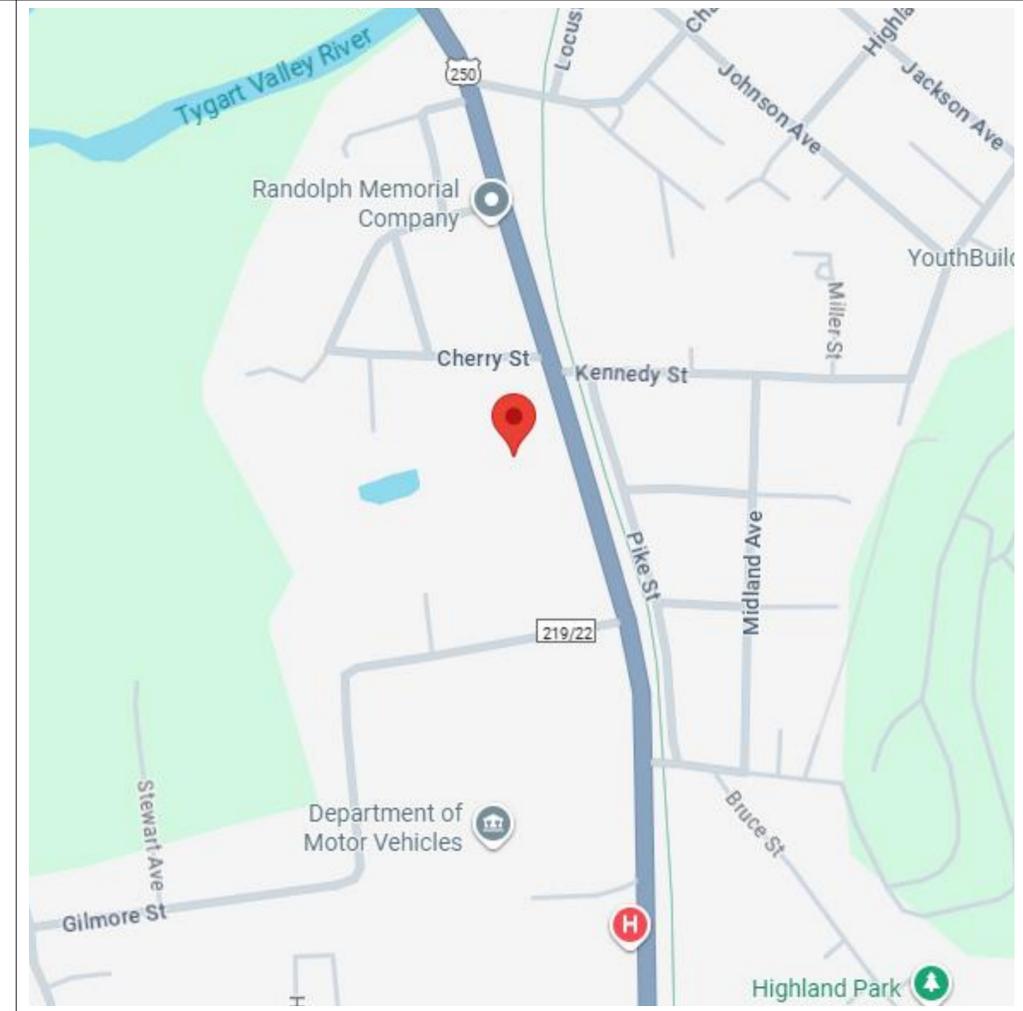
**WEST VIRGINIA DIVISION OF
HIGHWAYS**

**DISTRICT 8 HEADQUARTERS
ROOF REPLACEMENTS**

DRAWING INDEX

- A-1 – COVER PAGE
- B-1 – OVERALL ROOF PLAN
- B-1.1 – OVERALL ROOF DIMENSIONS
- B-2 – ROOF DETAILS

LOCATION MAP



WEST VIRGINIA DIVISION OF HIGHWAYS
DISTRICT 8 HEADQUARTERS
 1101 NORTH RANDOLPH AVE,
 Elkins, WV 26241

SHEET TITLE:

**COVER
PAGE**

SHEET NO.

A-1



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 DISTRICT 8 HEADQUARTERS
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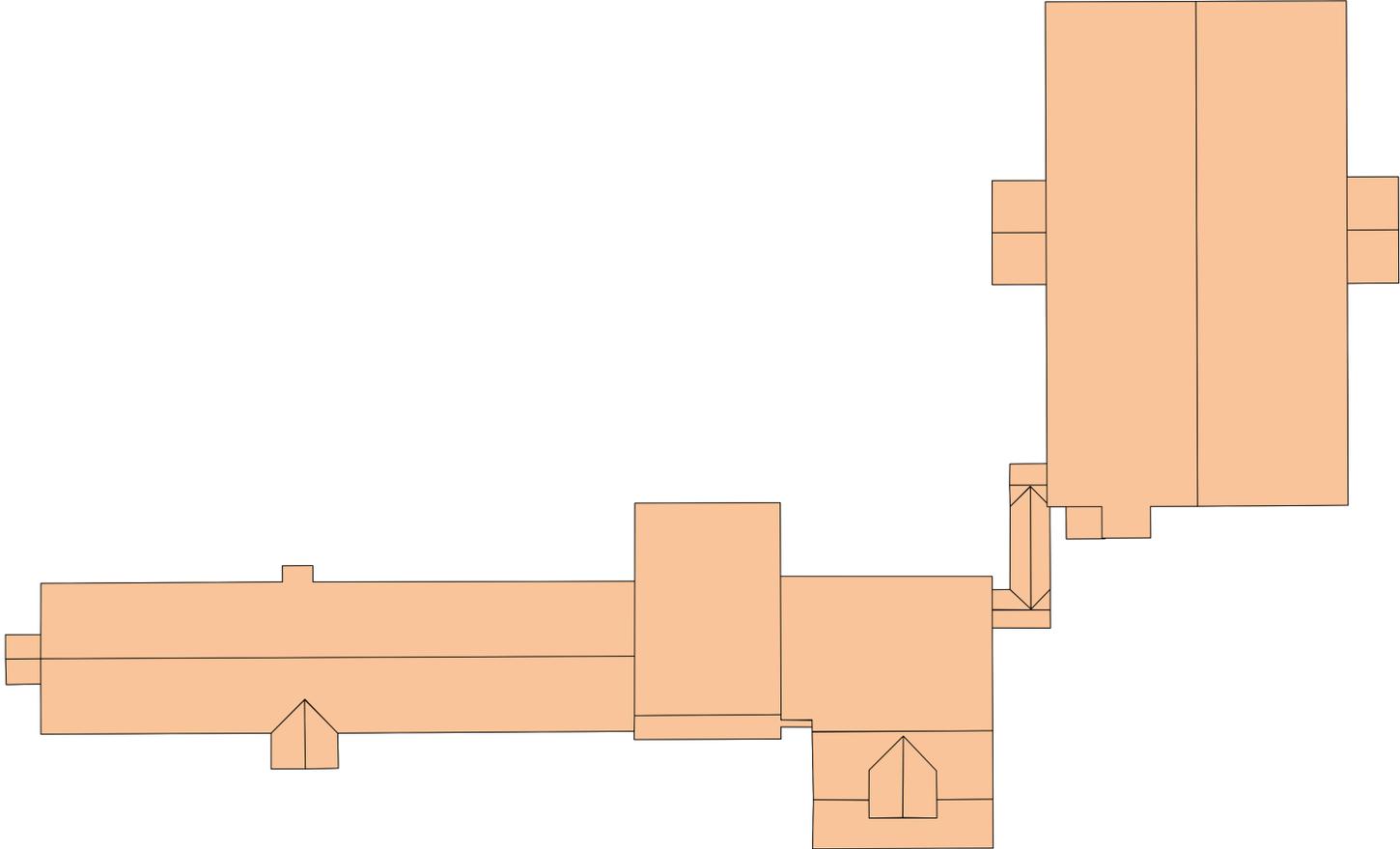
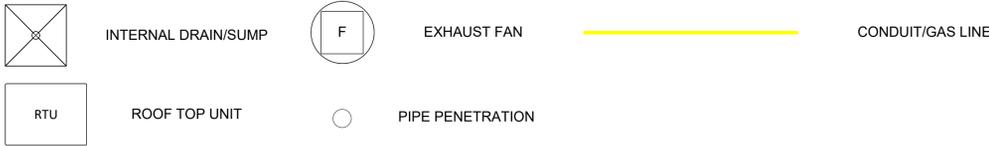
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**OVERALL
 ROOF
 PLAN**

SHEET NO.

B-1

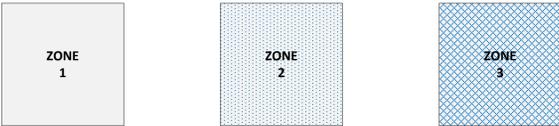
ROOF PLAN LEGEND



Standing Seam Metal Roofing System over Wood Deck

Wind Uplift Calculations
 TBD

UPLIFT ZONES



DRAWING REFERENCE NOTES

- 1
- 2
- 3
- 4
- 5
- 6

GENERAL NOTES

- 1.) IT IS THE ROOFING CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE THEMSELVES WITH ALL DETAILS INVOLVED IN THE ROOFING CONTRACT.
- 2.) ALL DRAWINGS ARE GRAPHIC REPRESENTATION OF APPROXIMATE LOCATIONS OF EXISTING AND NEW MATERIALS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL EXISTING CONDITIONS PRIOR TO COMMENCEMENT OF WORK.
- 3.) ROOFING CONTRACTOR TO PROTECT ALL ADJACENT SURFACES NOT SCHEDULED FOR WORK AND TO REPAIR ANY DAMAGED AREAS AS A RESULT OF CONTRACTOR WORK AT NO ADDITIONAL COST TO THE OWNER.
- 4.) ROOFING CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN WATER TIGHTNESS AND PROVIDE PROTECTION AT ANY/ALL OPENINGS IN THE ROOF LEFT AT THE END OF EACH CONSTRUCTION DAY.
- 5.) ROOFING CONTRACTOR TO VERIFY AT THE SITE THAT ALL ROOF DRAINS AND DRAIN PIPING ARE UNPLUGGED AND CLEAR AT THE COMPLETION OF THE PROJECT. ALL DRAIN LINES TO BE CAMERA SCOPED PRIOR TO COMPLETION OF PROJECT.
- 6.) CONTRACTOR TO REMOVE ANY OBSTACLES DURING ROOF REPLACEMENT AND REINSTALL AFTER NEW ROOFING HAS BEEN COMPLETED.
- 7.) CONTRACTOR SHALL NOT STORE OR STOCKPILE DEMOLISHED MATERIALS ON THE ROOF DURING CONSTRUCTION.
- 8.) THE JOB SITE SHALL BE MAINTAINED IN A REASONABLY NEAT AND ORDERLY CONDITION AND KEPT FREE FROM ACCUMULATIONS OF WASTE MATERIALS AND RUBBISH DURING THE ENTIRE CONSTRUCTION PERIOD.
- 9.) CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, CONDITIONS AND QUANTITIES.
- 10.) ALL CONTRACTORS, BOTH PRIME AND SUB, SHALL COORDINATE THEIR WORK WITH ALL ADJACENT WORK AND SHALL COOPERATE WITH ALL OTHER TRADES SO AS TO FACILITATE THE GENERAL PROGRESS OF THE WORK, AND TO AVOID CONFLICT. NO COMPENSATION WILL BE GIVEN FOR FAILURE OF CONTRACTOR TO COORDINATE THEIR CONTRACT WORK WITH ADJACENT TRADES.
- 11.) THE DRAWINGS SHOWN, COVERING EXISTING CONDITIONS, HAVE BEEN PREPARED FROM THE BEST INFORMATION AVAILABLE. ACTUAL CONDITIONS MAY VARY.
- 12.) PROVIDE TEMPORARY WEATHER PROTECION DURING INTERVAL BETWEEN REMOVAL OF EXISTING ITEMS AND INSTALLATION OF NEW ITEMS TO INSURE THAT NO WATER LEAKAGE OR DAMAGE OCCURS TO THE EXISTING STRUCTURE OR BUILDING INTERIOR.
- 13.) ROOF CONTRACTOR IS RESPONSIBLE FOR RAISING CURBS, MECHANICAL EQUIPMENT, EQUIPMENT SUPPORTS, PLUMBING STACKS, DRAIN SCUPPERS, AND PERIMETER BLOCKING TO PROVIDE SUFFICIENT FLASHING HEIGHT TO MEET MANUFACTURER'S REQUIREMENTS AND ACCOMMODATE NEW INSULATION THICKNESS.
- 14.) ROOFING CONTRACTOR TO EMPLOY A CERTIFIED MECHANICAL CONTRACTOR TO REMOVE AND REINSTALL MECHANICAL EQUIPMENT AND RECHARGE SYSTEMS AS REQUIRED. TEST AND CERTIFY OPERATION OF EQUIPMENT.
- 15.) ROOFING CONTRACTOR TO EMPLOY A CERTIFIED ELECTRICAL CONTRACTOR TO DISCONNECT AND RECONNECT ALL POWER LINES AND DEVEICS AS REQUIRED. TEST AND CERTIFY OPERATION OF EQUIPMENT.
- 16.) ALL TAPERED CRICKETS AND SADDLES TO BE CONSTRUCTED WITH A L/W RATIO OF 3:1.
- 17.) THE FULL SPECIFICATION AND DRAWING SET TO BE KEPT ON-SITE, HARDCOPY OR DIGITAL, THROUGHOUT THE PROJECT.
- 18.) USE OF PROVIDED TAPERED INSULATION LAYOUTS CONFIRMS AGREEMENT WITH DESIGN. ADDITIONAL TAPERED PANELS MAY BE NECESSARY TO DIVERT RUNOFF AROUND UNITS OR OTHER ROOFTOP OBSTRUCTIONS.
- 19.) ROOFING CONTRACTOR TO RESTORE CLAMPING RINGS AND STRAINERS, AND REPLACE STUDS AND NUTS ON ALL INTERNAL DRAIN BOWLS.
- 20.) IT IS THE CONTRACTORS RESPONSIBILITY TO ENSURE A TOTAL SLOPE OF 1/4:12 IS ACHIEVED ON THE NEW ROOF SYSTEM THROUGH COMBINED DECK AND INSULATION TAPER.
- 21.) THE CONTRACTOR MUST INCLUDE PRICE FOR NAILERS/WOOD FOR ALL EDGE METAL/COPING IN THEIR ORIGINAL BID.
- 22.) ALL PIPE/CONDUIT SUPPORTS ARE TO BE REPLACED WITH NEW STANDS

WVDOH District 8 HQ Roof Replacement: Scope of Work

- Remove and discard existing shingles, edge metal, and flashings to expose the deck.
- Inspect the deck for deterioration/damage and perform any necessary repair at a cost per square foot unit basis.
- Raise plumbing stacks, utility lines, and equipment supports providing sufficient flashing height to meet manufacturer's requirements and accommodate new roof system thickness.
- Remove all equipment marked for removal or not in use.
- Install a self-adhered ice/water shield directly to the wood decking throughout the entirety of the roof that is receiving standing seam metal.
- Install new Standing Seam metal roof system over the installed ice/water barrier according to the manufacturer's recommendations.
- Install new gutters and downspouts where existing systems are removed.
- Install S-5! snow protection systems according to the manufacturer.
- The manufacturer's 35 year NDL warranty for the Standing Seam roof system will be provided upon completion.



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SHEET TITLE:

ROOF DETAILS

SHEET NO.

B-2

REQUEST FOR QUOTATION
District 8 HQ Roof Replacement
1121 N Randolph Ave, Elkins, WV 26241

11.4. Anyone performing under this Contract will be subject to Agency's security protocol and procedures.

11.5. Vendor shall inform all staff of Agency's security protocol and procedures.

12. MISCELLANEOUS:

12.1. Contract Manager: During its performance of this Contract, Vendor must designate and maintain a primary contract manager responsible for overseeing Vendor's responsibilities under this Contract. The Contract manager must be available during normal business hours to address any customer service or other issues related to this Contract. Vendor should list its Contract manager and his or her contact information below.

Contract Manager: Jonathan Zimmer

Telephone Number: 703-794-2121

Fax Number: 

Email Address: Jon@vertexroofin.com

REQUEST FOR QUOTATION
District 8 HQ Roof Replacement
1121 N Randolph Ave, Elkins, WV 26241

EXHIBIT A – Pricing Page

DATE: February 18, 2026

NAME OF VENDOR: Vertex Roofing Contractors, Inc.

The aforementioned, hereinafter called Vendor, being familiar with and understanding the Bidding Documents and having examined the sites and being familiar with all local conditions affecting the project hereby proposes to furnish all labor, material, equipment, supplies and transportation and to perform all Work in accordance with the Bidding Documents within the time set forth for the sum of:

TOTAL BID AMOUNT: Six Hundred Fifty One Thousand Dollars

For the sum of: \$ 651,000.00

(Show amount in both words and numbers)

GENERAL TERMS AND CONDITIONS:

1. CONTRACTUAL AGREEMENT: Issuance of an Award Document signed by the Purchasing Division Director, or his designee, and approved as to form by the Attorney General's office constitutes acceptance by the State of this Contract made by and between the State of West Virginia and the Vendor. Vendor's signature on its bid, or on the Contract if the Contract is not the result of a bid solicitation, signifies Vendor's agreement to be bound by and accept the terms and conditions contained in this Contract.

2. DEFINITIONS: As used in this Solicitation/Contract, the following terms shall have the meanings attributed to them below. Additional definitions may be found in the specifications included with this Solicitation/Contract.

2.1. "Agency" or "Agencies" means the agency, board, commission, or other entity of the State of West Virginia that is identified on the first page of the Solicitation or any other public entity seeking to procure goods or services under this Contract.

2.2. "Bid" or "Proposal" means the vendors submitted response to this solicitation.

2.3. "Contract" means the binding agreement that is entered into between the State and the Vendor to provide the goods or services requested in the Solicitation.

2.4. "Director" means the Director of the West Virginia Department of Administration, Purchasing Division.

2.5. "Purchasing Division" means the West Virginia Department of Administration, Purchasing Division.

2.6. "Award Document" means the document signed by the Agency and the Purchasing Division, and approved as to form by the Attorney General, that identifies the Vendor as the contract holder.

2.7. "Solicitation" means the official notice of an opportunity to supply the State with goods or services that is published by the Purchasing Division.

2.8. "State" means the State of West Virginia and/or any of its agencies, commissions, boards, etc. as context requires.

2.9. "Vendor" or "Vendors" means any entity submitting a bid in response to the Solicitation, the entity that has been selected as the lowest responsible bidder, or the entity that has been awarded the Contract as context requires.

3. CONTRACT TERM; RENEWAL; EXTENSION: The term of this Contract shall be determined in accordance with the category that has been identified as applicable to this Contract below:

Term Contract

Initial Contract Term: The Initial Contract Term will be for a period of _____
_____. The Initial Contract Term becomes effective on the effective start date listed on the first page of this Contract, identified as the State of West Virginia contract cover page containing the signatures of the Purchasing Division, Attorney General, and Encumbrance clerk (or another page identified as _____), and the Initial Contract Term ends on the effective end date also shown on the first page of this Contract.

Renewal Term: This Contract may be renewed upon the mutual written consent of the Agency, and the Vendor, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). Any request for renewal should be delivered to the Agency and then submitted to the Purchasing Division thirty (30) days prior to the expiration date of the initial contract term or appropriate renewal term. A Contract renewal shall be in accordance with the terms and conditions of the original contract. Unless otherwise specified below, renewal of this Contract is limited to _____ successive one (1) year periods or multiple renewal periods of less than one year, provided that the multiple renewal periods do not exceed the total number of months available in all renewal years combined. Automatic renewal of this Contract is prohibited. Renewals must be approved by the Vendor, Agency, Purchasing Division and Attorney General's office (Attorney General approval is as to form only)

Alternate Renewal Term – This contract may be renewed for _____ successive _____ year periods or shorter periods provided that they do not exceed the total number of months contained in all available renewals. Automatic renewal of this Contract is prohibited. Renewals must be approved by the Vendor, Agency, Purchasing Division and Attorney General's office (Attorney General approval is as to form only)

Delivery Order Limitations: In the event that this contract permits delivery orders, a delivery order may only be issued during the time this Contract is in effect. Any delivery order issued within one year of the expiration of this Contract shall be effective for one year from the date the delivery order is issued. No delivery order may be extended beyond one year after this Contract has expired.

Fixed Period Contract: This Contract becomes effective upon Vendor's receipt of the notice to proceed and must be completed within one hundred eighty (180) days.

Fixed Period Contract with Renewals: This Contract becomes effective upon Vendor's receipt of the notice to proceed and part of the Contract more fully described in the attached specifications must be completed within _____ days. Upon completion of the work covered by the preceding sentence, the vendor agrees that:

the contract will continue for _____ years;

the contract may be renewed for _____ successive _____ year periods or shorter periods provided that they do not exceed the total number of months contained in all available renewals. Automatic renewal of this Contract is prohibited. Renewals must be approved by the Vendor, Agency, Purchasing Division and Attorney General's Office (Attorney General approval is as to form only).

One-Time Purchase: The term of this Contract shall run from the issuance of the Award Document until all of the goods contracted for have been delivered, but in no event will this Contract extend for more than one fiscal year.

Construction/Project Oversight: This Contract becomes effective on the effective start date listed on the first page of this Contract, identified as the State of West Virginia contract cover page containing the signatures of the Purchasing Division, Attorney General, and Encumbrance clerk (or another page identified as _____), and continues until the project for which the vendor is providing oversight is complete.

Other: Contract Term specified in _____

4. AUTHORITY TO PROCEED: Vendor is authorized to begin performance of this contract on the date of encumbrance listed on the front page of the Award Document unless either the box for "Fixed Period Contract" or "Fixed Period Contract with Renewals" has been checked in Section 3 above. If either "Fixed Period Contract" or "Fixed Period Contract with Renewals" has been checked, Vendor must not begin work until it receives a separate notice to proceed from the State. The notice to proceed will then be incorporated into the Contract via change order to memorialize the official date that work commenced.

5. QUANTITIES: The quantities required under this Contract shall be determined in accordance with the category that has been identified as applicable to this Contract below.

Open End Contract: Quantities listed in this Solicitation/Award Document are approximations only, based on estimates supplied by the Agency. It is understood and agreed that the Contract shall cover the quantities actually ordered for delivery during the term of the Contract, whether more or less than the quantities shown.

Service: The scope of the service to be provided will be more clearly defined in the specifications included herewith.

Combined Service and Goods: The scope of the service and deliverable goods to be provided will be more clearly defined in the specifications included herewith.

One-Time Purchase: This Contract is for the purchase of a set quantity of goods that are identified in the specifications included herewith. Once those items have been delivered, no additional goods may be procured under this Contract without an appropriate change order approved by the Vendor, Agency, Purchasing Division, and Attorney General's office.

Construction: This Contract is for construction activity more fully defined in the specifications.

6. EMERGENCY PURCHASES: The Purchasing Division Director may authorize the Agency to purchase goods or services in the open market that Vendor would otherwise provide under this Contract if those goods or services are for immediate or expedited delivery in an emergency. Emergencies shall include, but are not limited to, delays in transportation or an unanticipated increase in the volume of work. An emergency purchase in the open market, approved by the Purchasing Division Director, shall not constitute of breach of this Contract and shall not entitle the Vendor to any form of compensation or damages. This provision does not excuse the State from fulfilling its obligations under a One-Time Purchase contract.

7. REQUIRED DOCUMENTS: All of the items checked in this section must be provided to the Purchasing Division by the Vendor as specified:

LICENSE(S) / CERTIFICATIONS / PERMITS: In addition to anything required under the Section of the General Terms and Conditions entitled Licensing, the apparent successful Vendor shall furnish proof of the following licenses, certifications, and/or permits upon request and in a form acceptable to the State. The request may be prior to or after contract award at the State's sole discretion.

West Virginia Contractors License

The apparent successful Vendor shall also furnish proof of any additional licenses or certifications contained in the specifications regardless of whether or not that requirement is listed above.

8. INSURANCE: The apparent successful Vendor shall furnish proof of the insurance identified by a checkmark below prior to Contract award. The insurance coverages identified below must be maintained throughout the life of this contract. Thirty (30) days prior to the expiration of the insurance policies, Vendor shall provide the Agency with proof that the insurance mandated herein has been continued. Vendor must also provide Agency with immediate notice of any changes in its insurance policies, including but not limited to, policy cancelation, policy reduction, or change in insurers. The apparent successful Vendor shall also furnish proof of any additional insurance requirements contained in the specifications prior to Contract award regardless of whether that insurance requirement is listed in this section.

Vendor must maintain:

Commercial General Liability Insurance in at least an amount of: \$1,000,000.00 per occurrence.

Automobile Liability Insurance in at least an amount of: \$1,000,000.00 per occurrence.

Professional/Malpractice/Errors and Omission Insurance in at least an amount of: _____ per occurrence. Notwithstanding the forgoing, Vendor's are not required to list the State as an additional insured for this type of policy.

Commercial Crime and Third Party Fidelity Insurance in an amount of: _____ per occurrence.

Cyber Liability Insurance in an amount of: _____ per occurrence.

Builders Risk Insurance in an amount equal to 100% of the amount of the Contract.

Pollution Insurance in an amount of: _____ per occurrence.

Aircraft Liability in an amount of: _____ per occurrence.

9. WORKERS' COMPENSATION INSURANCE: Vendor shall comply with laws relating to workers compensation, shall maintain workers' compensation insurance when required, and shall furnish proof of workers' compensation insurance upon request.

10. VENUE: All legal actions for damages brought by Vendor against the State shall be brought in the West Virginia Claims Commission. Other causes of action must be brought in the West Virginia court authorized by statute to exercise jurisdiction over it.

11. LIQUIDATED DAMAGES: This clause shall in no way be considered exclusive and shall not limit the State or Agency's right to pursue any other available remedy. Vendor shall pay liquidated damages in the amount specified below or as described in the specifications:

\$150 _____ for each late day _____.

Liquidated Damages Contained in the Specifications.

Liquidated Damages Are Not Included in this Contract.

12. ACCEPTANCE: Vendor's signature on its bid, or on the certification and signature page, constitutes an offer to the State that cannot be unilaterally withdrawn, signifies that the product or service proposed by vendor meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise indicated, and signifies acceptance of the terms and conditions contained in the Solicitation unless otherwise indicated.

13. PRICING: The pricing set forth herein is firm for the life of the Contract, unless specified elsewhere within this Solicitation/Contract by the State. A Vendor's inclusion of price adjustment provisions in its bid, without an express authorization from the State in the Solicitation to do so, may result in bid disqualification. Notwithstanding the foregoing, Vendor must extend any publicly advertised sale price to the State and invoice at the lower of the contract price or the publicly advertised sale price.

14. PAYMENT IN ARREARS: Payments for goods/services will be made in arrears only upon receipt of a proper invoice, detailing the goods/services provided or receipt of the goods/services, whichever is later. Notwithstanding the foregoing, payments for software maintenance, licenses, or subscriptions may be paid annually in advance.

15. PAYMENT METHODS: Vendor must accept payment by electronic funds transfer and P-Card. (The State of West Virginia's Purchasing Card program, administered under contract by a banking institution, processes payment for goods and services through state designated credit cards.)

16. TAXES: The Vendor shall pay any applicable sales, use, personal property or any other taxes arising out of this Contract and the transactions contemplated thereby. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes.

17. ADDITIONAL FEES: Vendor is not permitted to charge additional fees or assess additional charges that were not either expressly provided for in the solicitation published by the State of West Virginia, included in the Contract, or included in the unit price or lump sum bid amount that Vendor is required by the solicitation to provide. Including such fees or charges as notes to the solicitation may result in rejection of vendor's bid. Requesting such fees or charges be paid after the contract has been awarded may result in cancellation of the contract.

18. FUNDING: This Contract shall continue for the term stated herein, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise made available, this Contract becomes void and of no effect beginning on July 1 of the fiscal year for which funding has not been appropriated or otherwise made available. If that occurs, the State may notify the Vendor that an alternative source of funding has been obtained and thereby avoid the automatic termination. Non-appropriation or non-funding shall not be considered an event of default.

19. CANCELLATION: The Purchasing Division Director reserves the right to cancel this Contract immediately upon written notice to the vendor if the materials or workmanship supplied do not conform to the specifications contained in the Contract. The Purchasing Division Director may also cancel any purchase or Contract upon 30 days written notice to the Vendor in accordance with West Virginia Code of State Rules § 148-1-5.2.b.

20. TIME: Time is of the essence regarding all matters of time and performance in this Contract.

21. APPLICABLE LAW: This Contract is governed by and interpreted under West Virginia law without giving effect to its choice of law principles. Any information provided in specification manuals, or any other source, verbal or written, which contradicts or violates the West Virginia Constitution, West Virginia Code, or West Virginia Code of State Rules is void and of no effect.

22. COMPLIANCE WITH LAWS: Vendor shall comply with all applicable federal, state, and local laws, regulations and ordinances. By submitting a bid, Vendor acknowledges that it has reviewed, understands, and will comply with all applicable laws, regulations, and ordinances.

SUBCONTRACTOR COMPLIANCE: Vendor shall notify all subcontractors providing commodities or services related to this Contract that as subcontractors, they too are required to comply with all applicable laws, regulations, and ordinances. Notification under this provision must occur prior to the performance of any work under the contract by the subcontractor.

23. ARBITRATION: Any references made to arbitration contained in this Contract, Vendor's bid, or in any American Institute of Architects documents pertaining to this Contract are hereby deleted, void, and of no effect.

24. MODIFICATIONS: This writing is the parties' final expression of intent. Notwithstanding anything contained in this Contract to the contrary no modification of this Contract shall be binding without mutual written consent of the Agency, and the Vendor, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). Any change to existing contracts that adds work or changes contract cost, and were not included in the original contract, must be approved by the Purchasing Division and the Attorney General's Office (as to form) prior to the implementation of the change or commencement of work affected by the change.

25. WAIVER: The failure of either party to insist upon a strict performance of any of the terms or provision of this Contract, or to exercise any option, right, or remedy herein contained, shall not be construed as a waiver or a relinquishment for the future of such term, provision, option, right, or remedy, but the same shall continue in full force and effect. Any waiver must be expressly stated in writing and signed by the waiving party.

26. SUBSEQUENT FORMS: The terms and conditions contained in this Contract shall supersede any and all subsequent terms and conditions which may appear on any form documents submitted by Vendor to the Agency or Purchasing Division such as price lists, order forms, invoices, sales agreements, or maintenance agreements, and includes internet websites or other electronic documents. Acceptance or use of Vendor's forms does not constitute acceptance of the terms and conditions contained thereon.

27. ASSIGNMENT: Neither this Contract nor any monies due, or to become due hereunder, may be assigned by the Vendor without the express written consent of the Agency, the Purchasing Division, the Attorney General's office (as to form only), and any other government agency or office that may be required to approve such assignments.

28. WARRANTY: The Vendor expressly warrants that the goods and/or services covered by this Contract will: (a) conform to the specifications, drawings, samples, or other description furnished or specified by the Agency; (b) be merchantable and fit for the purpose intended; and (c) be free from defect in material and workmanship.

29. STATE EMPLOYEES: State employees are not permitted to utilize this Contract for personal use and the Vendor is prohibited from permitting or facilitating the same.

30. PRIVACY, SECURITY, AND CONFIDENTIALITY: The Vendor agrees that it will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the Agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the Agency's policies, procedures, and rules. Vendor further agrees to comply with the Confidentiality Policies and Information Security Accountability Requirements, set forth in www.state.wv.us/admin/purchase/privacy.

31. YOUR SUBMISSION IS A PUBLIC DOCUMENT: Vendor's entire response to the Solicitation and the resulting Contract are public documents. As public documents, they will be disclosed to the public following the bid/proposal opening or award of the contract, as required by the competitive bidding laws of West Virginia Code §§ 5A-3-1 et seq., 5-22-1 et seq., and 5G-1-1 et seq. and the Freedom of Information Act West Virginia Code §§ 29B-1-1 et seq.

DO NOT SUBMIT MATERIAL YOU CONSIDER TO BE CONFIDENTIAL, A TRADE SECRET, OR OTHERWISE NOT SUBJECT TO PUBLIC DISCLOSURE.

Submission of any bid, proposal, or other document to the Purchasing Division constitutes your explicit consent to the subsequent public disclosure of the bid, proposal, or document. The Purchasing Division will disclose any document labeled "confidential," "proprietary," "trade secret," "private," or labeled with any other claim against public disclosure of the documents, to include any "trade secrets" as defined by West Virginia Code § 47-22-1 et seq. All submissions are subject to public disclosure without notice.

32. LICENSING: In accordance with West Virginia Code of State Rules § 148-1-6.1.e, Vendor must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, West Virginia Insurance Commission, or any other state agency or political subdivision. Obligations related to political subdivisions may include, but are not limited to, business licensing, business and occupation taxes, inspection compliance, permitting, etc. Upon request, the Vendor must provide all necessary releases to obtain information to enable the Purchasing Division Director or the Agency to verify that the Vendor is licensed and in good standing with the above entities.

SUBCONTRACTOR COMPLIANCE: Vendor shall notify all subcontractors providing commodities or services related to this Contract that as subcontractors, they too are required to be licensed, in good standing, and up-to-date on all state and local obligations as described in this section. Obligations related to political subdivisions may include, but are not limited to, business licensing, business and occupation taxes, inspection compliance, permitting, etc. Notification under this provision must occur prior to the performance of any work under the contract by the subcontractor.

33. ANTITRUST: In submitting a bid to, signing a contract with, or accepting a Award Document from any agency of the State of West Virginia, the Vendor agrees to convey, sell, assign, or transfer to the State of West Virginia all rights, title, and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the State of West Virginia for price fixing and/or unreasonable restraints of trade relating to the particular commodities or services purchased or acquired by the State of West Virginia. Such assignment shall be made and become effective at the time the purchasing agency tenders the initial payment to Vendor.

34. VENDOR NON-CONFLICT: Neither Vendor nor its representatives are permitted to have any interest, nor shall they acquire any interest, direct or indirect, which would compromise the performance of its services hereunder. Any such interests shall be promptly presented in detail to the Agency.

35. VENDOR RELATIONSHIP: The relationship of the Vendor to the State shall be that of an independent contractor and no principal-agent relationship or employer-employee relationship is contemplated or created by this Contract. The Vendor as an independent contractor is solely liable for the acts and omissions of its employees and agents. Vendor shall be responsible for selecting, supervising, and compensating any and all individuals employed pursuant to the terms of this Solicitation and resulting contract. Neither the Vendor, nor any employees or subcontractors of the Vendor, shall be deemed to be employees of the State for any purpose whatsoever. Vendor shall be exclusively responsible for payment of employees and contractors for all wages and salaries, taxes, withholding payments, penalties, fees, fringe benefits, professional liability insurance premiums, contributions to insurance and pension, or other deferred compensation plans, including but not limited to, Workers' Compensation and Social Security obligations, licensing fees, etc. and the filing of all necessary documents, forms, and returns pertinent to all of the foregoing.

Vendor shall hold harmless the State, and shall provide the State and Agency with a defense against any and all claims including, but not limited to, the foregoing payments, withholdings, contributions, taxes, Social Security taxes, and employer income tax returns.

36. INDEMNIFICATION: The Vendor agrees to indemnify, defend, and hold harmless the State and the Agency, their officers, and employees from and against: (1) Any claims or losses for services rendered by any subcontractor, person, or firm performing or supplying services, materials, or supplies in connection with the performance of the Contract; (2) Any claims or losses resulting to any person or entity injured or damaged by the Vendor, its officers, employees, or subcontractors by the publication, translation, reproduction, delivery, performance, use, or disposition of any data used under the Contract in a manner not authorized by the Contract, or by Federal or State statutes or regulations; and (3) Any failure of the Vendor, its officers, employees, or subcontractors to observe State and Federal laws including, but not limited to, labor and wage and hour laws.

37. NO DEBT CERTIFICATION: In accordance with West Virginia Code §§ 5A-3-10a and 5-22-1(i), the State is prohibited from awarding a contract to any bidder that owes a debt to the State or a political subdivision of the State. By submitting a bid, or entering into a contract with the State, Vendor is affirming that (1) for construction contracts, the Vendor is not in default on any monetary obligation owed to the state or a political subdivision of the state, and (2) for all other contracts, neither the Vendor nor any related party owe a debt as defined above, and neither the Vendor nor any related party are in employer default as defined in the statute cited above unless the debt or employer default is permitted under the statute.

38. CONFLICT OF INTEREST: Vendor, its officers or members or employees, shall not presently have or acquire an interest, direct or indirect, which would conflict with or compromise the performance of its obligations hereunder. Vendor shall periodically inquire of its officers, members and employees to ensure that a conflict of interest does not arise. Any conflict of interest discovered shall be promptly presented in detail to the Agency.

39. REPORTS: Vendor shall provide the Agency and/or the Purchasing Division with the following reports identified by a checked box below:

Such reports as the Agency and/or the Purchasing Division may request. Requested reports may include, but are not limited to, quantities purchased, agencies utilizing the contract, total contract expenditures by agency, etc.

Quarterly reports detailing the total quantity of purchases in units and dollars, along with a listing of purchases by agency. Quarterly reports should be delivered to the Purchasing Division via email at purchasing.division@wv.gov.

40. BACKGROUND CHECK: In accordance with W. Va. Code § 15-2D-3, the State reserves the right to prohibit a service provider's employees from accessing sensitive or critical information or to be present at the Capitol complex based upon results addressed from a criminal background check. Service providers should contact the West Virginia Division of Protective Services by phone at (304) 558-9911 for more information.

41. PREFERENCE FOR USE OF DOMESTIC STEEL PRODUCTS: Except when authorized by the Director of the Purchasing Division pursuant to W. Va. Code § 5A-3-56, no contractor may use or supply steel products for a State Contract Project other than those steel products made in the United States. A contractor who uses steel products in violation of this section may be subject to civil penalties pursuant to W. Va. Code § 5A-3-56. As used in this section:

- a. "State Contract Project" means any erection or construction of, or any addition to, alteration of or other improvement to any building or structure, including, but not limited to, roads or highways, or the installation of any heating or cooling or ventilating plants or other equipment, or the supply of and materials for such projects, pursuant to a contract with the State of West Virginia for which bids were solicited on or after June 6, 2001.
- b. "Steel Products" means products rolled, formed, shaped, drawn, extruded, forged, cast, fabricated or otherwise similarly processed, or processed by a combination of two or more or such operations, from steel made by the open heath, basic oxygen, electric furnace, Bessemer or other steel making process.
- c. The Purchasing Division Director may, in writing, authorize the use of foreign steel products if:
 1. The cost for each contract item used does not exceed one tenth of one percent (.1%) of the total contract cost or two thousand five hundred dollars (\$2,500.00), whichever is greater. For the purposes of this section, the cost is the value of the steel product as delivered to the project; or
 2. The Director of the Purchasing Division determines that specified steel materials are not produced in the United States in sufficient quantity or otherwise are not reasonably available to meet contract requirements.

42. PREFERENCE FOR USE OF DOMESTIC ALUMINUM, GLASS, AND STEEL: In Accordance with W. Va. Code § 5-19-1 et seq., and W. Va. CSR § 148-10-1 et seq., for every contract or subcontract, subject to the limitations contained herein, for the construction, reconstruction, alteration, repair, improvement or maintenance of public works or for the purchase of any item of machinery or equipment to be used at sites of public works, only domestic aluminum, glass or steel products shall be supplied unless the spending officer determines, in writing, after the receipt of offers or bids, (1) that the cost of domestic aluminum, glass or steel products is unreasonable or inconsistent with the public interest of the State of West Virginia, (2) that domestic aluminum, glass or steel products are not produced in sufficient quantities to meet the contract requirements, or (3) the available domestic aluminum, glass, or steel do not meet the contract specifications. This provision only applies to public works contracts awarded in an amount more than fifty thousand dollars (\$50,000) or public works contracts that require more than ten thousand pounds of steel products.

The cost of domestic aluminum, glass, or steel products may be unreasonable if the cost is more than twenty percent (20%) of the bid or offered price for foreign made aluminum, glass, or steel products. If the domestic aluminum, glass or steel products to be supplied or produced in a “substantial labor surplus area”, as defined by the United States Department of Labor, the cost of domestic aluminum, glass, or steel products may be unreasonable if the cost is more than thirty percent (30%) of the bid or offered price for foreign made aluminum, glass, or steel products. This preference shall be applied to an item of machinery or equipment, as indicated above, when the item is a single unit of equipment or machinery manufactured primarily of aluminum, glass or steel, is part of a public works contract and has the sole purpose or of being a permanent part of a single public works project. This provision does not apply to equipment or machinery purchased by a spending unit for use by that spending unit and not as part of a single public works project.

All bids and offers including domestic aluminum, glass or steel products that exceed bid or offer prices including foreign aluminum, glass or steel products after application of the preferences provided in this provision may be reduced to a price equal to or lower than the lowest bid or offer price for foreign aluminum, glass or steel products plus the applicable preference. If the reduced bid or offer prices are made in writing and supersede the prior bid or offer prices, all bids or offers, including the reduced bid or offer prices, will be reevaluated in accordance with this rule.

43. INTERESTED PARTY SUPPLEMENTAL DISCLOSURE: W. Va. Code § 6D-1-2 requires that for contracts with an actual or estimated value of at least \$1 million, the Vendor must submit to the Agency a disclosure of interested parties prior to beginning work under this Contract. Additionally, the Vendor must submit a supplemental disclosure of interested parties reflecting any new or differing interested parties to the contract, which were not included in the original pre-work interested party disclosure, within 30 days following the completion or termination of the contract. A copy of that form is included with this solicitation or can be obtained from the WV Ethics Commission. This requirement does not apply to publicly traded companies listed on a national or international stock exchange. A more detailed definition of interested parties can be obtained from the form referenced above.

44. PROHIBITION AGAINST USED OR REFURBISHED: Unless expressly permitted in the solicitation published by the State, Vendor must provide new, unused commodities, and is prohibited from supplying used or refurbished commodities, in fulfilling its responsibilities under this Contract.

45. VOID CONTRACT CLAUSES: This Contract is subject to the provisions of West Virginia Code § 5A-3-62, which automatically voids certain contract clauses that violate State law.

46. ISRAEL BOYCOTT: Bidder understands and agrees that, pursuant to W. Va. Code § 5A-3-63, it is prohibited from engaging in a boycott of Israel during the term of this contract.

ADDITIONAL TERMS AND CONDITIONS (Construction Contracts Only)

1. CONTRACTOR'S LICENSE: Until June 15, 2021, West Virginia Code § 21-11-2, and after that date, § 30-42-2, requires that all persons desiring to perform contracting work in this state be licensed. The West Virginia Contractors Licensing Board is empowered to issue the contractor's license. Applications for a contractor's license may be made by contacting the West Virginia Contractor Licensing Board.

The apparent successful Vendor must furnish a copy of its contractor's license prior to the issuance of a contract award document.

2. BONDS: The following bonds must be submitted:

- BID BOND:** Pursuant to the requirements contained in W. Va. Code § 5-22-1(c), All Vendors submitting a bid on a construction project shall furnish a valid bid bond in the amount of five percent (5%) of the total amount of the bid protecting the State of West Virginia. **THE BID BOND MUST BE SUBMITTED WITH THE BID OR VENDOR'S BID WILL BE DISQUALIFIED.**
- PERFORMANCE BOND:** The apparent successful Vendor shall provide a performance bond in the amount of 100% of the contract. The performance bond must be received by the Purchasing Division prior to Contract award. (Attorney General requires use of the State approved bond forms found at: www.state.wv.us/admin/purchase/forms2.html)
- LABOR/MATERIAL PAYMENT BOND:** The apparent successful Vendor shall provide a labor/material payment bond in the amount of 100% of the Contract value. The labor/material payment bond must be delivered to the Purchasing Division prior to Contract award. (Attorney General requires use of the State approved bond forms found at: www.state.wv.us/admin/purchase/forms2.html)
- MAINTENANCE BOND:** The apparent successful Vendor shall provide a two (2) year maintenance bond covering the roofing system if the work impacts an existing roof. The amount of the bond must be equal to the price associated with the percentage of the project impacting the roof. The maintenance bond must be issued and delivered to the Purchasing Division prior to Contract award. (Attorney General requires use of the State approved bond forms found at: www.state.wv.us/admin/purchase/forms2.html)

At a minimum, all construction projects require a bid bond, performance bond, and labor/material payment bond. Failure on the part of the state of West Virginia to checkmark the required bonds above does not relieve the vendor from the legal requirement of providing these bonds.

In lieu of the Bid Bond, the Vendor may provide certified checks, cashier's checks, or irrevocable letters of credit. Any certified check, cashier's check, or irrevocable letter of credit provided in lieu of the bid bond must be of the same amount required of the Bid Bond and delivered with the bid.

3. DRUG-FREE WORKPLACE AFFIDAVIT: W. Va. Code § 21-1D-5 provides that any solicitation for a public improvement contract requires each Vendor that submits a bid for the work to submit an affidavit that the Vendor has a written plan for a drug-free workplace policy. If the affidavit is not submitted with the bid submission, the Purchasing Division shall promptly request by telephone and electronic mail that the low bidder and second low bidder provide the affidavit within one business day of the request. Failure to submit the affidavit within one business day of receiving the request shall result in disqualification of the bid. To comply with this law, Vendor should complete the enclosed drug-free workplace affidavit and submit the same with its bid. Failure to submit the signed and notarized drugfree workplace affidavit or a similar affidavit that fully complies with the requirements of the applicable code, within one business day of being requested to do so shall result in disqualification of Vendor's bid. Pursuant to W. Va. Code 21-1D-2(b) and (k), this provision does not apply to public improvement contracts the value of which is \$100,000 or less or temporary or emergency repairs.

3.1. DRUG-FREE WORKPLACE POLICY: Pursuant to W. Va. Code § 21-1D-4, Vendor and its subcontractors must implement and maintain a written drug-free workplace policy that complies with said article. The awarding public authority shall cancel this contract if: (1) Vendor fails to implement and maintain a written drug-free workplace policy described in the preceding paragraph, (2) Vendor fails to provide information regarding implementation of its drug-free workplace policy at the request of the public authority; or (3) Vendor provides to the public authority false information regarding the contractor's drug-free workplace policy.

Pursuant to W. Va. Code 21-1D-2(b) and (k), this provision does not apply to public improvement contracts the value of which is \$100,000 or less or temporary or emergency repairs.

4. DRUG FREE WORKPLACE REPORT: Pursuant to W. Va. Code § 21-1D-7b, no less than once per year, or upon completion of the project, every contractor shall provide a certified report to the public authority which let the contract. For contracts over \$25,000, the public authority shall be the West Virginia Purchasing Division. For contracts of \$25,000 or less, the public authority shall be the agency issuing the contract. The report shall include:

- (1) Information to show that the education and training service to the requirements of West Virginia Code § 21-1D-5 was provided;
- (2) The name of the laboratory certified by the United States Department of Health and Human Services or its successor that performs the drug tests;
- (3) The average number of employees in connection with the construction on the public improvement;
- (4) Drug test results for the following categories including the number of positive tests and the number of negative tests: (A) Pre-employment and new hires; (B) Reasonable suspicion; (C) Post-accident; and (D) Random.

Vendor should utilize the attached Certified Drug Free Workplace Report Coversheet when submitting the report required hereunder. Pursuant to W. Va. Code 21-1D-2(b) and (k), this provision does not apply to public improvement contracts the value of which is \$100,000 or less or temporary or emergency repairs.

5. AIA DOCUMENTS: All construction contracts that will be completed in conjunction with architectural services procured under Chapter 5G of the West Virginia Code will be governed by the attached AIA documents, as amended by the Supplementary Conditions for the State of West Virginia, in addition to the terms and conditions contained herein.

6. PROHIBITION AGAINST GENERAL CONDITIONS: Notwithstanding anything contained in the AIA Documents or the Supplementary Conditions, the State of West Virginia will not pay for general conditions, or winter conditions, or any other condition representing a delay in the contracts. The Vendor is expected to mitigate delay costs to the greatest extent possible and any costs associated with Delays must be specifically and concretely identified. The state will not consider an average daily rate multiplied by the number of days extended to be an acceptable charge.

7. GREEN BUILDINGS MINIMUM ENERGY STANDARDS: In accordance with § 22-29-4, all new building construction projects of public agencies that have not entered the schematic design phase prior to July 1, 2012, or any building construction project receiving state grant funds and appropriations, including public schools, that have not entered the schematic design phase prior to July 1, 2012, shall be designed and constructed complying with the ICC International Energy Conservation Code, adopted by the State Fire Commission, and the ANSI/ASHRAE/IESNA Standard 90.1-2007: Provided, That if any construction project has a commitment of federal funds to pay for a portion of such project, this provision shall only apply to the extent such standards are consistent with the federal standards.

8. LOCAL LABOR MARKET HIRING REQUIREMENT: Pursuant to West Virginia Code §21-1C-1 et seq., Employers shall hire at least seventy-five percent of employees for public improvement construction projects from the local labor market, to be rounded off, with at least two employees from outside the local labor market permissible for each employer per project.

Any employer unable to employ the minimum number of employees from the local labor market shall inform the nearest office of Workforce West Virginia of the number of qualified employees needed and provide a job description of the positions to be filled.

If, within three business days following the placing of a job order, Workforce West Virginia is unable to refer any qualified job applicants to the employer or refers less qualified job applicants than the number requested, then Workforce West Virginia shall issue a waiver to the employer stating the unavailability of applicant and shall permit the employer to fill any positions covered by the waiver from outside the local labor market. The waiver shall be in writing and shall be issued within the prescribed three days. A waiver certificate shall be sent to both the employer for its permanent project records and to the public authority.

Any employer who violates this requirement is subject to a civil penalty of \$250 per each employee less than the required threshold of seventy-five percent per day of violation after receipt of a notice of violation.

Any employer that continues to violate any provision of this article more than fourteen calendar days after receipt of a notice of violation is subject to a civil penalty of \$500 per each employee less than the required threshold of seventy-five percent per day of violation.

The following terms used in this section have the meaning shown below.

(1) The term “construction project” means any construction, reconstruction, improvement, enlargement, painting, decorating or repair of any public improvement let to contract in an amount equal to or greater than \$500,000. The term “construction project” does not include temporary or emergency repairs;

(2) The term “employee” means any person hired or permitted to perform hourly work for wages by a person, firm or corporation in the construction industry; The term “employee” does not include:(i) Bona fide employees of a public authority or individuals engaged in making temporary or emergency repairs;(ii) Bona fide independent contractors; or(iii) Salaried supervisory personnel necessary to assure efficient execution of the employee's work;

(3) The term “employer” means any person, firm or corporation employing one or more employees on any public improvement and includes all contractors and subcontractors;

(4) The term “local labor market” means every county in West Virginia and any county outside of West Virginia if any portion of that county is within fifty miles of the border of West Virginia;

(5) The term “public improvement” includes the construction of all buildings, roads, highways, bridges, streets, alleys, sewers, ditches, sewage disposal plants, waterworks, airports and all other structures that may be let to contract by a public authority, excluding improvements funded, in whole or in part, by federal funds.

9. DAVIS-BACON AND RELATED ACT WAGE RATES:

The work performed under this contract is federally funded in whole, or in part. Pursuant to _____, Vendors are required to pay applicable Davis-Bacon wage rates.

The work performed under this contract is not subject to Davis-Bacon wage rates.

10. SUBCONTRACTOR LIST SUBMISSION: In accordance with W. Va. Code § 5-22-1, the apparent low bidder on a contract valued at more than \$250,000.00 for the construction, alteration, decoration, painting or improvement of a new or existing building or structure shall submit a list of all subcontractors who will perform more than \$25,000.00 of work on the project including labor and materials. (This section does not apply to any other construction projects, such as highway, mine reclamation, water or sewer projects.) The subcontractor list shall be provided to the Purchasing Division within one business day of the opening of bids for review. If the apparent low bidder fails to submit the subcontractor list, the Purchasing Division shall promptly request by telephone and electronic mail that the low bidder and second low bidder provide the subcontractor list within one business day of the request. Failure to submit the subcontractor list within one business day of receiving the request shall result in disqualification of the bid.

If no subcontractors who will perform more than \$25,000.00 of work are to be used to complete the project, the apparent low bidder must make this clear on the subcontractor list, in the bid itself, or in response to the Purchasing Division's request for the subcontractor list.

a. **Required Information.** The subcontractor list must contain the following information:

i. Bidder's name

ii. Name of each subcontractor performing more than \$25,000 of work on the project.

iii. The license number of each subcontractor, as required by W. Va. Code § 21-11-1 et. seq.

iv. If applicable, a notation that no subcontractor will be used to perform more than \$25,000.00 of work. (This item iv. is not required if the vendor makes this clear in the bid itself or in documentation following the request for the subcontractor list.)

b. **Subcontractor List Submission Form:** The subcontractor list may be submitted in any form, including the attached form, as long as the required information noted above is included. If any information is missing from the bidder's subcontractor list submission, it may be obtained from other documents such as bids, emails, letters, etc. that accompany the subcontractor list submission.

c. **Substitution of Subcontractor.** Written approval must be obtained from the State Spending Unit before any subcontractor substitution is permitted. Substitutions are not permitted unless:

i. The subcontractor listed in the original bid has filed for bankruptcy;

ii. The subcontractor in the original bid has been debarred or suspended; or

iii. The contractor certifies in writing that the subcontractor listed in the original bid fails, is unable, or refuses to perform his subcontract.

**ADDITIONAL TERMS AND CONDITIONS
(Architectural and Engineering Contracts Only)**

1. PLAN AND DRAWING DISTRIBUTION: All plans and drawings must be completed and available for distribution at least five business days prior to a scheduled pre-bid meeting for the construction or other work related to the plans and drawings.

2. PROJECT ADDENDA REQUIREMENTS: The Architect/Engineer and/or Agency shall be required to abide by the following schedule in issuing construction project addenda. The Architect/Engineer shall prepare any addendum materials for which it is responsible, and a list of all vendors that have obtained drawings and specifications for the project. The Architect/Engineer shall then send a copy of the addendum materials and the list of vendors to the State Agency for which the contract is issued to allow the Agency to make any necessary modifications. The addendum and list shall then be forwarded to the Purchasing Division buyer by the Agency. The Purchasing Division buyer shall send the addendum to all interested vendors and, if necessary, extend the bid opening date. Any addendum should be received by the Purchasing Division at least fourteen (14) days prior to the bid opening date.

3. PRE-BID MEETING RESPONSIBILITIES: The Architect/Engineer shall be available to attend any pre-bid meeting for the construction or other work resulting from the plans, drawings, or specifications prepared by the Architect/Engineer.

4. AIA DOCUMENTS: All construction contracts that will be completed in conjunction with architectural services procured under Chapter 5G of the West Virginia Code will be governed by the attached AIA documents, as amended by the Supplementary Conditions for the State of West Virginia, in addition to the terms and conditions contained herein. The terms and conditions of this document shall prevail over anything contained in the AIA Documents or the Supplementary Conditions.

5. GREEN BUILDINGS MINIMUM ENERGY STANDARDS: In accordance with West Virginia Code § 22-29-4, all new building construction projects of public agencies that have not entered the schematic design phase prior to July 1, 2012, or any building construction project receiving state grant funds and appropriations, including public schools, that have not entered the schematic design phase prior to July 1, 2012, shall be designed and constructed complying with the ICC International Energy Conservation Code, adopted by the State Fire Commission, and the ANSI/ASHRAE/IESNA Standard 90.1-2007: Provided, That if any construction project has a commitment of federal funds to pay for a portion of such project, this provision shall only apply to the extent such standards are consistent with the federal standards.

DESIGNATED CONTACT: Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

(Printed Name and Title) Jonthan Zimmer President

(Address) 12050 Cadet CT. Manassas, VA 20109

(Phone Number) / (Fax Number) 703-794-2121

(email address) Jon@vertexroofinc.com Nicole@vertexroofinc.com

CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through wvOASIS, I certify that: I have reviewed this Solicitation/Contract in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation/Contract for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that this bid or offer was made without prior understanding, agreement, or connection with any entity submitting a bid or offer for the same material, supplies, equipment or services; that this bid or offer is in all respects fair and without collusion or fraud; that this Contract is accepted or entered into without any prior understanding, agreement, or connection to any other entity that could be considered a violation of law; that I am authorized by the Vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on Vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

By signing below, I further certify that I understand this Contract is subject to the provisions of West Virginia Code § 5A-3-62, which automatically voids certain contract clauses that violate State law; and that pursuant to W. Va. Code 5A-3-63, the entity entering into this contract is prohibited from engaging in a boycott against Israel.

Vertex Roofing Contractors, Inc.

(Company)



(Signature of Authorized Representative)

Jonathan Zimmer President 2/18/2026

(Printed Name and Title of Authorized Representative) (Date)

703-794-2121

(Phone Number) (Fax Number)

Jon@vertexroofinc.com nicole@vertexroofinc.com

(Email Address)

INSTRUCTIONS TO VENDORS SUBMITTING BIDS

1. REVIEW DOCUMENTS THOROUGHLY: The attached documents contain a solicitation for bids. Please read these instructions and all documents attached in their entirety. These instructions provide critical information about requirements that if overlooked could lead to disqualification of a Vendor's bid. All bids must be submitted in accordance with the provisions contained in these instructions and the Solicitation. Failure to do so may result in *disqualification of Vendor's bid*.

2. MANDATORY TERMS: The Solicitation may contain **mandatory** provisions identified by the use of the words "**must**," "**will**," and "**shall**." Failure to comply with a mandatory term in the Solicitation will result in bid disqualification.

3. PRE-BID MEETING: The item identified below shall apply to this Solicitation.

A pre-bid meeting will not be held prior to bid opening

A **MANDATORY PRE-BID** meeting will be held at the following place and time:

WVDOH
District 8 Headquarters
1101 N. Randolph Ave.
Elkins, WV 26241
February 3, 2026 at 10:00AM

All Vendors submitting a bid must attend the **mandatory** pre-bid meeting. Failure to attend the **mandatory** pre-bid meeting shall result in disqualification of the Vendor's bid. No one individual is permitted to represent more than one vendor at the pre-bid meeting. Any individual that does attempt to represent two or more vendors will be required to select one vendor to which the individual's attendance will be attributed. The vendors not selected will be deemed to have not attended the pre-bid meeting unless another individual attended on their behalf.

An attendance sheet provided at the pre-bid meeting shall serve as the official document verifying attendance. Any person attending the pre-bid meeting on behalf of a Vendor must list on the attendance sheet his or her name and the name of the Vendor he or she is representing. It is the Vendor's responsibility to locate the attendance sheet and provide the required information. Failure to complete the attendance sheet as required may result in disqualification of Vendor's bid.

Vendors who arrive after the starting time but prior to the end of the pre-bid will be permitted to sign in but are charged with knowing all matters discussed at the pre-bid.

Any discussions or answers to questions at the pre-bid meeting are preliminary in nature and are non-binding. Official and binding answers to questions will be published in a written addendum to the Solicitation prior to bid opening.

4. VENDOR QUESTION DEADLINE: *Vendors may submit questions relating to this Solicitation to the Purchasing Division. Questions must be submitted in writing. All questions must be submitted on or before the date listed below and to the address listed below to be considered.* A written response will be published in a Solicitation addendum if a response is possible and appropriate. Non-written discussions, conversations, or questions and answers regarding this Solicitation are preliminary in nature and are non-binding.

Submitted emails should have the solicitation number in the subject line. Question

Submission Deadline: February 11, 2026 by 10:00am

Submit Questions to: John Estep
2019 Washington Street, East Charleston, WV 25305
Fax: (304) 558-3970
Email: john.w.estep@wv.gov

5. VERBAL COMMUNICATION: Any verbal communication between the Vendor and any State personnel is not binding, including verbal communication at the mandatory pre-bid conference. Only information issued in writing and added to the Solicitation by an official written addendum by the Purchasing Division is binding.

6. BID SUBMISSION: All bids must be submitted on or before the date and time of the bid opening listed in section 7 below. Vendors can submit bids electronically through *wvOASIS*, in paper form delivered to the Purchasing Division at the address listed below either in person or by courier, or in facsimile form by faxing to the Purchasing Division at the number listed below. Notwithstanding the foregoing, the Purchasing Division may prohibit the submission of bids electronically through *wvOASIS* at its sole discretion. Such a prohibition will be contained and communicated in the *wvOASIS* system resulting in the Vendor's inability to submit bids through *wvOASIS*. The Purchasing Division will not accept bids or modification of bids via email.

Bids submitted in paper, facsimile, or via wvOASIS must contain a signature. Failure to submit a bid in any form without a signature will result in rejection of your bid.

A bid submitted in paper or facsimile form should contain the information listed below on the face of the submission envelope or fax cover sheet. Otherwise, the bid may be rejected by the Purchasing Division.

VENDOR NAME:
BUYER: JOHN ESTEP
SOLICITATION NO.: CRFQ 0803 DOT2600000052
BID OPENING DATE: February 18, 2026
BID OPENING TIME: 1:30 PM
FAX NUMBER: 304-558-3970

Any bid received by the Purchasing Division staff is considered to be in the possession of the Purchasing Division and will not be returned for any reason.

Bid Delivery Address and Fax Number:

Department of Administration, Purchasing Division 2019 Washington Street East
Charleston, WV 25305-0130
Fax: 304-558-3970

7. BID OPENING: Bids submitted in response to this Solicitation will be opened at the location identified below on the date and time listed below. Delivery of a bid after the bid opening date and time will result in bid disqualification. For purposes of this Solicitation, a bid is considered delivered when confirmation of delivery is provided by wvOASIS (in the case of electronic submission) or when the bid is time stamped by the official Purchasing Division time clock (in the case of hand delivery or via delivery by mail).

Bid Opening Date and Time: February 18, 2026 @ 1:30 PM

Bid Opening Location:
Department of Administration, Purchasing Division
2019 Washington Street East
Charleston, WV 25305-0130

8. ADDENDUM ACKNOWLEDGEMENT: Changes or revisions to this Solicitation will be made by an official written addendum issued by the Purchasing Division. Vendor should acknowledge receipt of all addenda issued with this Solicitation by completing an Addendum Acknowledgement Form. Failure to acknowledge addenda may result in bid disqualification. The addendum acknowledgement should be submitted with the bid to expedite document processing.

9. BID FORMATTING: Vendor should type or electronically enter the information onto its bid to prevent errors in the evaluation. Failure to type or electronically enter the information may result in bid disqualification.

10. ALTERNATE MODEL OR BRAND: Unless the box below is checked, any model, brand, or specification listed in this Solicitation establishes the acceptable level of quality only and is not intended to reflect a preference for, or in any way favor, a particular brand or vendor. Vendors may bid alternates to a listed model or brand provided that the alternate is at least equal to the model or brand and complies with the required specifications. The equality of any alternate being bid shall be determined by the State at its sole discretion. Any Vendor bidding an alternate model or brand **shall** clearly identify the alternate items in its bid and should include manufacturer's specifications, industry literature, and/or any other relevant documentation demonstrating the equality of the alternate items. Failure to provide information for alternate items **may** be grounds for rejection of a Vendor's bid.

This Solicitation is based upon a standardized commodity established under W. Va. Code § 5A-3-61. Vendors are expected to bid the standardized commodity identified. Failure to bid the standardized commodity will result in your firm's bid being rejected.

11. COMMUNICATION LIMITATIONS: In accordance with West Virginia Code of State Rules §148-1-6.6.2, communication with the State of West Virginia or any of its employees regarding this Solicitation during the solicitation, bid, evaluation or award periods, except through the Purchasing Division, is strictly prohibited without prior Purchasing Division approval. Purchasing Division approval for such communication is implied for all agency delegated and exempt purchases.

12. REGISTRATION: Prior to Contract award, the apparent successful Vendor **must** be properly registered with the West Virginia Purchasing Division and must have paid the \$125 fee, if applicable.

13. UNIT PRICE: Unit prices **shall** prevail in cases of a discrepancy in the Vendor's bid.

14. PREFERENCE: Vendor Preference may be requested in purchases of motor vehicles or construction and maintenance equipment and machinery used in highway and other infrastructure projects. Any request for preference must be submitted in writing with the bid, must specifically identify the preference requested with reference to the applicable subsection of West Virginia Code § 5A-3-37, and must include with the bid any information necessary to evaluate and confirm the applicability of the requested preference. A request form to help facilitate the request can be found at: www.state.wv.us/admin/purchase/vrc/Venpref.pdf.

15A. RECIPROCAL PREFERENCE: The State of West Virginia applies a reciprocal preference to all solicitations for commodities and printing in accordance with W. Va. Code § 5A-3-37(b). In effect, non-resident vendors receiving a preference in their home states, will see that same preference granted to West Virginia resident vendors bidding against them in West Virginia. Any request for reciprocal preference must include with the bid any information necessary to evaluate and confirm the applicability of the preference. A request form to help facilitate the request can be found at: www.state.wv.us/admin/purchase/vrc/Venpref.pdf.

15. SMALL, WOMEN-OWNED, OR MINORITY-OWNED BUSINESSES:

For any solicitations publicly advertised for bid, in accordance with West Virginia Code §5A-3-37 and W. Va. CSR § 148-22-9, any non-resident vendor certified as a small, women-owned, or minority-owned business under W. Va. CSR § 148-22-9 shall be provided the same preference made available to any resident vendor. Any non-resident small, women-owned, or minority-owned business must identify itself as such in writing, must submit that writing to the Purchasing Division with its bid, and must be properly certified under W. Va. CSR § 148-22-9 prior to contract award to receive the preferences made available to resident vendors.

16. WAIVER OF MINOR IRREGULARITIES: The Director reserves the right to waive minor irregularities in bids or specifications in accordance with West Virginia Code of State Rules § 148-1-4.7.

17. ELECTRONIC FILE ACCESS RESTRICTIONS: Vendor must ensure that its submission in wvOASIS can be accessed and viewed by the Purchasing Division staff immediately upon bid opening. The Purchasing Division will consider any file that cannot be immediately accessed and viewed at the time of the bid opening (such as, encrypted files, password protected files, or incompatible files) to be blank or incomplete as context requires and are therefore unacceptable. A vendor will not be permitted to unencrypt files, remove password protections, or resubmit documents after bid opening to make a file viewable if those documents are required with the bid. A Vendor may be required to provide document passwords or remove access restrictions to allow the Purchasing Division to print or electronically save documents provided that those documents are viewable by the Purchasing Division prior to obtaining the password or removing the access restriction.

18. NON-RESPONSIBLE: The Purchasing Division Director reserves the right to reject the bid of any vendor as Non-Responsible in accordance with W. Va. Code of State Rules § 148-1-5.3, when the Director determines that the vendor submitting the bid does not have the capability to fully perform or lacks the integrity and reliability to assure good-faith performance.”

19. ACCEPTANCE/REJECTION: The State may accept or reject any bid in whole, or in part in accordance with W. Va. Code of State Rules § 148-1-4.6. and § 148-1-6.3.”

20. WITH THE BID REQUIREMENTS: In instances where these specifications require documentation or other information with the bid, and a vendor fails to provide it with the bid, the Director of the Purchasing Division reserves the right to request those items after bid opening and prior to contract award pursuant to the authority to waive minor irregularities in bids or specifications under W. Va. CSR § 148-1-4.7. This authority does not apply to instances where state law mandates receipt with the bid.

21. EMAIL NOTIFICATION OF AWARD: The Purchasing Division will attempt to provide bidders with e-mail notification of contract award when a solicitation that the bidder participated in has been awarded. For notification purposes, bidders must provide the Purchasing Division with a valid email address in the bid response. Bidders may also monitor wvOASIS or the Purchasing Division's website to determine when a contract has been awarded.

22. EXCEPTIONS AND CLARIFICATIONS: The Solicitation contains the specifications that **shall** form the basis of a contractual agreement. **Vendor shall clearly mark any exceptions, clarifications, or other proposed modifications in its bid.** Exceptions to, clarifications of, or modifications of a requirement or term and condition of the Solicitation may result in bid disqualification.

State of West Virginia
Purchasing Division

CERTIFIED DRUG-FREE WORKPLACE REPORT COVERSHEET

In accordance with *West Virginia Code* § 21-1D-7b, no less than once per year, or upon completion of the project, every contractor shall provide a certified report to the public authority which let the contract. That report must include each of the items identified below in the Required Report Content section.

Instructions: Vendor should complete this coversheet, attach it to the required report, and submit it to the appropriate location as follows: For contracts more than \$25,000, the report should be mailed to the West Virginia Purchasing Division at 2019 Washington Street East, Charleston, WV 25305. For contracts of \$25,000 or less, the vendor should mail the report to the public authority issuing the contract.

Contract Identification:

Contract Number: CRFQ 0803 DOT2600000052

Contract Purpose: Removal, Repair, & Replacement of The District 8 HQ Roof

Agency Requesting Work: Department Of Administion Purchasing Division

Required Report Content: The attached report must include each of the items listed below. The vendor should check each box as an indication that the required information has been included in the attached report.

- Information indicating the education and training service to the requirements of *West Virginia Code* § 21-1D-5 was provided;
- Name of the laboratory certified by the United States Department of Health and Human Services or its successor that performs the drug tests;
- Average number of employees in connection with the construction on the public improvement;
- Drug test results for the following categories including the number of positive tests and the number of negative tests: (A) Pre-employment and new hires; (B) Reasonable suspicion; (C) Post-accident; and (D) Random.

Vendor Contact Information:

Vendor Name: Vertex Roofing Contractors, Inc.

Vendor Telephone: 703-794-2121

Vendor Address: 12050 Cadet Ct. Manassas VA.
20109

Vendor Fax: _____

Vendor E-Mail: Jon@vertexroofinc.com



State of West Virginia
DRUG FREE WORKPLACE CONFORMANCE AFFIDAVIT
West Virginia Code §21-1D-5

I, Jonathan Zimmer, after being first duly sworn, depose and state as follows:

1. I am an employee of Vertex Roofing Contractor, Inc.; and,
(Company Name)
2. I do hereby attest that Vertex Roofing Contractors, Inc.
(Company Name)

maintains a written plan for a drug-free workplace policy and that such plan and policy are in compliance with **West Virginia Code §21-1D**.

The above statements are sworn to under the penalty of perjury.

Printed Name: Jonathan Zimmer

Signature:

Title: President

Company Name: Vertex Roofing Contractors, Inc.

Date: February 18, 2026

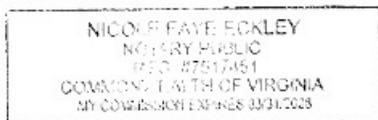
STATE OF ^{NE}WEST VIRGINIA,

COUNTY OF Prince William, TO-WIT:

Taken, subscribed and sworn to before me this 18 day of February, 2026.

By Commission expires March 31, 2028

(Seal)



(Notary Public)

Agency _____
REQ.P.O# _____

BID BOND

KNOW ALL MEN BY THESE PRESENTS, That we, the undersigned, Vertex Roofing Contractors Inc.
of Manassas, Virginia, as Principal, and West Bend Insurance Company
of West Bend, Wisconsin, a corporation organized and existing under the laws of the State of Wisconsin with its principal office in the City of West Bend, as Surety, are held and firmly bound unto the State of West Virginia, as Obligee, in the penal sum of Five Percent of the Total Amount Bid (\$ 5%) for the payment of which, well and truly to be made, we jointly and severally bind ourselves, our heirs, administrators, executors, successors and assigns.

The Condition of the above obligation is such that whereas the Principal has submitted to the Purchasing Section of the Department of Administration a certain bid or proposal, attached hereto and made a part hereof, to enter into a contract in writing for

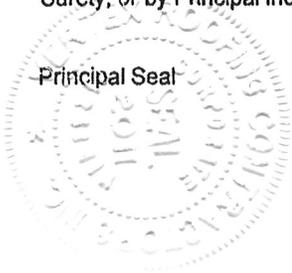
DOT 2600000052 Removal and Replacement of Existing Standing Seam Metal Roof

NOW THEREFORE,

- (a) If said bid shall be rejected, or
- (b) If said bid shall be accepted and the Principal shall enter into a contract in accordance with the bid or proposal attached hereto and shall furnish any other bonds and insurance required by the bid or proposal, and shall in all other respects perform the agreement created by the acceptance of said bid, then this obligation shall be null and void, otherwise this obligation shall remain in full force and effect. It is expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for the value received, hereby stipulates and agrees that the obligations of said Surety and its bond shall be in no way impaired or affected by any extension of the time within which the Obligee may accept such bid, and said Surety does hereby waive notice of any such extension.

WITNESS, the following signatures and seals of Principal and Surety, executed and sealed by a proper officer of Principal and Surety, or by Principal individually if Principal is an individual, this 18th day of February, 2026.



Principal Seal

Vertex Roofing Contractors, Inc
(Name of Principal)

By [Signature]
(Must be President, Vice President, or Duly Authorized Agent)

President
(Title)

Surety Seal



West Bend Insurance Company
(Name of Surety)

[Signature]

Darian Schrembs Attorney-in-Fact

IMPORTANT – Surety executing bonds must be licensed in West Virginia to transact surety insurance, must affix its seal, and must attach a power of attorney with its seal affixed.



Bond No. 2669374

POWER OF ATTORNEY

Know all men by these Presents, that West Bend Insurance Company (formerly known as West Bend Mutual Insurance Company prior to 1/1/2024), a corporation having its principal office in the City of West Bend, Wisconsin does make, constitute and appoint:

Darian Schrembs

lawful Attorney(s)-in-fact, to make, execute, seal and deliver for and on its behalf as surety and as its act and deed any and all bonds, undertakings and contracts of suretyship, provided that no bond or undertaking or contract of suretyship executed under this authority shall exceed in amount the sum of: Thirty Million Dollars (\$30,000,000)

This Power of Attorney is granted and is signed and sealed by facsimile under and by the authority of the following Resolution adopted by the Board of Directors of West Bend Insurance Company by unanimous consent resolution effective the 1st day of January 2024.

Appointment of Attorney-In-Fact. The president or any vice president, or any other officer of West Bend Insurance Company may appoint by written certificate Attorneys-In-Fact to act on behalf of the company in the execution of and attesting of bonds and undertakings and other written obligatory instruments of like nature. The signature of any officer authorized hereby and the corporate seal may be affixed by facsimile to any such power of attorney or to any certificate relating therefore and any such power of attorney or certificate bearing such facsimile signatures or facsimile seal shall be valid and binding upon the company, and any such power so executed and certified by facsimile signatures and facsimile seal shall be valid and binding upon the company in the future with respect to any bond or undertaking or other writing obligatory in nature to which it is attached. Any such appointment may be revoked, for cause, or without cause, by any said officer at any time.

Any reference to West Bend Mutual Insurance Company in any Bond and all continuations thereof shall be considered a reference to West Bend Insurance Company.

In witness whereof, West Bend Insurance Company has caused these presents to be signed by its president undersigned and its corporate seal to be hereto duly attested by its secretary this 1st day of January 2024.

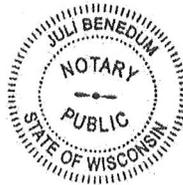
Attest Christopher C. Zwygart
Christopher C. Zwygart
Secretary



Robert J. Jacques
Robert J. Jacques
President

State of Wisconsin
County of Washington

On the 1st day of January 2024, before me personally came Robert Jacques, to me known being by duly sworn, did depose and say that he is the President of West Bend Insurance Company, the corporation described in and which executed the above instrument; that he knows the seal of the said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the board of directors of said corporation and that he signed his name thereto by like order.



Julie Benedum
Lead Corporate Attorney
Notary Public, Washington Co., WI
My Commission is Permanent

The undersigned, duly elected to the office stated below, now the incumbent in West Bend Insurance Company, a Wisconsin corporation authorized to make this certificate, Do Hereby Certify that the foregoing attached Power of Attorney remains in full force effect and has not been revoked and that the Resolution of the Board of Directors, set forth in the Power of Attorney is now in force.

Signed and sealed at West Bend, Wisconsin this 18th day of February, 2026.



Christopher C. Zwygart
Christopher C. Zwygart
Secretary

While a bond(s) is active, a bonded principal is a member of West Bend Mutual Holding Company. Please visit <https://www.thesilverlining.com/annual-meeting> for details regarding the annual membership meeting and your voting rights.