

Troutmans Building
Exterior Renovations (Roof and Masonry)
200 South Main Street
Greensburg, PA 15601

Project No. 2335

for the
Westmoreland County Housing Authority
167 South Greengate Road
Greensburg, PA 15601

Prepared by:

**SECTION 00 0101
ARCHITECT'S PROJECT NUMBER**

**TROUTMANS BUILDING EXTERIOR RENOVATIONS (ROOF AND MASONRY)
LOCATED AT
200 SOUTH MAIN STREET, GREENSBURG, PA 15601**

**FOR THE
WESTMORELAND COUNTY HOUSING AUTHORITY
167 SOUTH GREENGATE ROAD
GREENSBURG, PA 15601**



**OCTOBER 8, 2025
CANZIAN/JOHNSTON & ASSOCIATES, LLC
REGISTERED ARCHITECTS - PLANNERS
PARNASSUS BANK BUILDING - 361 MAIN STREET
NEW KENSINGTON, PA 15068
724.339.0511**

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**SECTION 00 0115
LIST OF DRAWING SHEETS**

DRAWING #	DRAWING TITLE
CS	COVER SHEET
G100	CODE SUMMARY, GENERAL NOTES, AND DIGITAL SITE PLAN
A101	FIRST FLOOR PLAN
A102	ROOF PLAN
A103	TAPER INSULATION PLAN - TROUTMAN BUILDING
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A202	BUILDING ELEVATION
A203	BUILDING ELEVATION
A204	BUILDING ELEVATION
A205	ROOF ELEVATIONS
A401	ROOF DETAILS
A402	ROOF DETAILS
E001	GENERAL NOTES, ABBREVIATIONS AND LEGEND
E100	EXTERIOR LIGHTING PLAN
E500	DETAILS, SCHEDULES AND DIAGRAMS

END OF SECTION

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NOTICE TO BIDDERS

ADVERTISEMENT FOR BIDS

The Westmoreland County Housing Authority (WCHA) D.B.A Troutman Building Associates (TBA) is requesting construction bids for the following:

**EXTERIOR RENOVATIONS
(ROOF AND MASONRY)**

LOCATED AT

TROUTMANS BUILDING – GREENSBURG PA 15601

GENERAL CONSTRUCTION (ROOFING) – CONTRACT: TBA 18.1.1-2025.1
GENERAL CONSTRUCTION (MASONRY) – CONTRACT: TBA 18.1.1-2025.2

Westmoreland County Housing Authority is requesting general construction bids for the referenced project through sealed bids which will be received by the **Westmoreland County Housing Authority**, until **November 3, 2025** at **10:00 A.M. (eastern standard time)**. Bids shall be deposited at the Administrative Office of the Westmoreland County Housing Authority, 167 South Greengate Road, Greensburg PA 15601. Bids received will then be opened publicly.

A **Pre-Bid Meeting** is scheduled for **October 16, 2025** at **1:00 P.M. (eastern standard time)** at **Troutmans Building** – Address: 200 South Main Street, Greensburg, PA 15061.

Electronic Bid Documents are available for downloading at www.wchaonline.com. Bidders are required to register online at the www.wchaonline.com to view bid documents. Plan holders proposing to bid shall also register their intent to submit a bid with **Westmoreland County Housing Authority** via email to lindam@wchaonline.com and eriks@wchaonline.com in accordance with the bid requirements.

Westmoreland County Housing Authority.

By: Michael L. Washowich, CEO - Executive Director / Contracting Officer

Tribune Review - Advertisement Dates: October 8th, 2025, and October 13th, 2025
Pittsburgh Courier - October 8th, 2025
Mon Valley Independent – October 8th, 2025

SECTION 00 2112
HUD 5369 INSTRUCTIONS TO BIDDERS OF CONTRACTS
FORM OF INSTRUCTIONS TO BIDDERS OF CONTRACTS
1.01 THE INSTRUCTIONS TO BIDDERS OF CONTRACTS APPLICABLE TO THIS CONTRACT IS
ATTACHED FOLLOWING THIS PAGE.
END OF SECTION

2335	HUD 5369 Instructions to Bidders of Contracts	00 2112 - 1
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**U.S. Department of Housing and
Urban Development**
Office of Public and Indian Housing

**Instructions to Bidders for Contracts
Public and Indian Housing Programs**

Instructions to Bidders for Contracts

Public and Indian Housing Programs

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1. Bid Preparation and Submission

(a) Bidders are expected to examine the specifications, drawings, all instructions, and, if applicable, the construction site (see also the contract clause entitled **Site Investigation and Conditions Affecting the Work** of the *General Conditions of the Contract for Construction*). Failure to do so will be at the bidders' risk.

(b) All bids must be submitted on the forms provided by the Public Housing Agency/Indian Housing Authority (PHA/IHA). Bidders shall furnish all the information required by the solicitation. Bids must be signed and the bidder's name typed or printed on the bid sheet and each continuation sheet which requires the entry of information by the bidder. Erasures or other changes must be initialed by the person signing the bid. Bids signed by an agent shall be accompanied by evidence of that agent's authority. (Bidders should retain a copy of their bid for their records.)

(c) Bidders must submit as part of their bid a completed form HUD-5369-A, "Representations, Certifications, and Other Statements of Bidders."

(d) All bid documents shall be sealed in an envelope which shall be clearly marked with the words "Bid Documents," the Invitation for Bids (IFB) number, any project or other identifying number, the bidder's name, and the date and time for receipt of bids.

(e) If this solicitation requires bidding on all items, failure to do so will disqualify the bid. If bidding on all items is not required, bidders should insert the words "No Bid" in the space provided for any item on which no price is submitted.

(f) Unless expressly authorized elsewhere in this solicitation, alternate bids will not be considered.

(g) Unless expressly authorized elsewhere in this solicitation, bids submitted by telegraph or facsimile (fax) machines will not be considered.

(h) If the proposed contract is for a Mutual Help project (as described in 24 CFR Part 905, Subpart E) that involves Mutual Help contributions of work, material, or equipment, supplemental information regarding the bid advertisement is provided as an attachment to this solicitation.

2. Explanations and Interpretations to Prospective Bidders

(a) Any prospective bidder desiring an explanation or interpretation of the solicitation, specifications, drawings, etc., must request it at least 7 days before the scheduled time for bid opening. Requests may be oral or written. Oral requests must be confirmed in writing. The only oral clarifications that will be provided will be those clearly related to solicitation procedures, i.e., not substantive technical information. No other oral explanation or interpretation will be provided. Any information given a prospective bidder concerning this solicitation will be furnished promptly to all other prospective bidders as a written amendment to the solicitation, if that information is necessary in submitting bids, or if the lack of it would be prejudicial to other prospective bidders.

(b) Any information obtained by, or provided to, a bidder other than by formal amendment to the solicitation shall not constitute a change to the solicitation.

3. Amendments to Invitations for Bids

(a) If this solicitation is amended, then all terms and conditions which are not modified remain unchanged.

(b) Bidders shall acknowledge receipt of any amendment to this solicitation (1) by signing and returning the amendment, (2) by identifying the amendment number and date on the bid form, or (3) by letter, telegram, or facsimile, if those methods are authorized in the solicitation. The PHA/IHA must receive acknowledgement by the time and at the place specified for receipt of bids. Bids which fail to acknowledge the bidder's receipt of any amendment will result in the rejection of the bid if the amendment(s) contained information which substantively changed the PHA's/IHA's requirements.

(c) Amendments will be on file in the offices of the PHA/IHA and the Architect at least 7 days before bid opening.

4. Responsibility of Prospective Contractor

(a) The PHA/IHA will award contracts only to responsible prospective contractors who have the ability to perform successfully under the terms and conditions of the proposed contract. In determining the responsibility of a bidder, the PHA/IHA will consider such matters as the bidder's:

- (1) Integrity;
- (2) Compliance with public policy;
- (3) Record of past performance; and
- (4) Financial and technical resources (including construction and technical equipment).

(b) Before a bid is considered for award, the bidder may be requested by the PHA/IHA to submit a statement or other documentation regarding any of the items in paragraph (a) above. Failure by the bidder to provide such additional information shall render the bidder nonresponsible and ineligible for award.

5. Late Submissions, Modifications, and Withdrawal of Bids

(a) Any bid received at the place designated in the solicitation after the exact time specified for receipt will not be considered unless it is received before award is made and it:

(1) Was sent by registered or certified mail not later than the fifth calendar day before the date specified for receipt of offers (e.g., an offer submitted in response to a solicitation requiring receipt of offers by the 20th of the month must have been mailed by the 15th);

(2) Was sent by mail, or if authorized by the solicitation, was sent by telegram or via facsimile, and it is determined by the PHA/IHA that the late receipt was due solely to mishandling by the PHA/IHA after receipt at the PHA/IHA; or

(3) Was sent by U.S. Postal Service Express Mail Next Day Service - Post Office to Addressee, not later than 5:00 p.m. at the place of mailing two working days prior to the date specified for receipt of proposals. The term "working days" excludes weekends and observed holidays.

(b) Any modification or withdrawal of a bid is subject to the same conditions as in paragraph (a) of this provision.

(c) The only acceptable evidence to establish the date of mailing of a late bid, modification, or withdrawal sent either by registered or certified mail is the U.S. or Canadian Postal Service postmark both on the envelope or wrapper and on the original receipt from the U.S. or Canadian Postal Service. Both postmarks must show a legible date or the bid, modification, or withdrawal shall be processed as if mailed late. "Postmark" means a printed, stamped, or otherwise placed impression (exclusive of a postage meter machine impression) that is readily identifiable without further action as having been supplied and affixed by employees of the U.S. or Canadian Postal Service on the date of mailing. Therefore, bidders should request the postal clerk to place a hand cancellation bull's-eye postmark on both the receipt and the envelope or wrapper.

(d) The only acceptable evidence to establish the time of receipt at the PHA/IHA is the time/date stamp of PHA/IHA on the proposal wrapper or other documentary evidence of receipt maintained by the PHA/IHA.

(e) The only acceptable evidence to establish the date of mailing of a late bid, modification, or withdrawal sent by Express Mail Next Day Service-Post Office to Addressee is the date entered by the post office receiving clerk on the "Express Mail Next Day Service-Post Office to Addressee" label and the postmark on both the envelope or wrapper and on the original receipt from the U.S. Postal Service. "Postmark" has the same meaning as defined in paragraph (c) of this provision, excluding postmarks of the Canadian Postal Service. Therefore, bidders should request the postal clerk to place a legible hand cancellation bull's eye postmark on both the receipt and Failure by a bidder to acknowledge receipt of the envelope or wrapper.

(f) Notwithstanding paragraph (a) of this provision, a late modification of an otherwise successful bid that makes its terms more favorable to the PHA/IHA will be considered at any time it is received and may be accepted.

(g) Bids may be withdrawn by written notice, or if authorized by this solicitation, by telegram (including mailgram) or facsimile machine transmission received at any time before the exact time set for opening of bids; provided that written confirmation of telegraphic or facsimile withdrawals over the signature of the bidder is mailed and postmarked prior to the specified bid opening time. A bid may be withdrawn in person by a bidder or its authorized representative if, before the exact time set for opening of bids, the identity of the person requesting withdrawal is established and the person signs a receipt for the bid.

6. Bid Opening

All bids received by the date and time of receipt specified in the solicitation will be publicly opened and read. The time and place of opening will be as specified in the solicitation. Bidders and other interested persons may be present.

7. Service of Protest

(a) Definitions. As used in this provision:

"Interested party" means an actual or prospective bidder whose direct economic interest would be affected by the award of the contract.

"Protest" means a written objection by an interested party to this solicitation or to a proposed or actual award of a contract pursuant to this solicitation.

(b) Protests shall be served on the Contracting Officer by obtaining written and dated acknowledgement from —

[Contracting Officer designate the official or location where a protest may be served on the Contracting Officer]

(c) All protests shall be resolved in accordance with the PHA's/IHA's protest policy and procedures, copies of which are maintained at the PHA/IHA.

8. Contract Award

(a) The PHA/IHA will evaluate bids in response to this solicitation without discussions and will award a contract to the responsible bidder whose bid, conforming to the solicitation, will be most advantageous to the PHA/IHA considering only price and any price-related factors specified in the solicitation.

(b) If the apparent low bid received in response to this solicitation exceeds the PHA's/IHA's available funding for the proposed contract work, the PHA/IHA may either accept separately priced items (see 8(e) below) or use the following procedure to determine contract award. The PHA/IHA shall apply in turn to each bid (proceeding in order from the apparent low bid to the high bid) each of the separately priced bid deductible items, if any, in their priority order set forth in this solicitation. If upon the application of the first deductible item to all initial bids, a new low bid is within the PHA's/IHA's available funding, then award shall be made to that bidder. If no bid is within the available funding amount, then the PHA/IHA shall apply the second deductible item. The PHA/IHA shall continue this process until an evaluated low bid, if any, is within the PHA's/IHA's available funding. If upon the application of all deductibles, no bid is within the PHA's/IHA's available funding, or if the solicitation does not request separately priced deductibles, the PHA/IHA shall follow its written policy and procedures in making any award under this solicitation.

(c) In the case of tie low bids, award shall be made in accordance with the PHA's/IHA's written policy and procedures.

(d) The PHA/IHA may reject any and all bids, accept other than the lowest bid (e.g., the apparent low bid is unreasonably low), and waive informalities or minor irregularities in bids received, in accordance with the PHA's/IHA's written policy and procedures.

(e) Unless precluded elsewhere in the solicitation, the PHA/IHA may accept any item or combination of items bid.

(f) The PHA/IHA may reject any bid as nonresponsive if it is materially unbalanced as to the prices for the various items of work to be performed. A bid is materially unbalanced when it is based on prices significantly less than cost for some work and prices which are significantly overstated for other work.

(g) A written award shall be furnished to the successful bidder within the period for acceptance specified in the bid and shall result in a binding contract without further action by either party.

9. Bid Guarantee (applicable to construction and equipment contracts exceeding \$25,000)

All bids must be accompanied by a negotiable bid guarantee which shall not be less than five percent (5%) of the amount of the bid. The bid guarantee may be a certified check, bank draft, U.S. Government Bonds at par value, or a bid bond secured by a surety company acceptable to the U.S. Government and authorized to do business in the state where the work is to be performed. In the case where the work under the contract will be performed on an Indian reservation area, the bid guarantee may also be an irrevocable Letter of Credit (see provision 10, Assurance of Completion, below). Certified checks and bank drafts must be made payable to the order of the PHA/IHA. The bid guarantee shall insure the execution of the contract and the furnishing of a method of assurance of completion by the successful bidder as required by the solicitation. Failure to submit a bid guarantee with the bid shall result in the rejection of the bid. Bid guarantees submitted by unsuccessful bidders will be returned as soon as practicable after bid opening.

10. Assurance of Completion

(a) Unless otherwise provided in State law, the successful bidder shall furnish an assurance of completion prior to the execution of any contract under this solicitation. This assurance may be [Contracting Officer check applicable items] —

[] (1) a performance and payment bond in a penal sum of 100 percent of the contract price; or, as may be required or permitted by State law;

[] (2) separate performance and payment bonds, each for 50 percent or more of the contract price;

[] (3) a 20 percent cash escrow;

[] (4) a 25 percent irrevocable letter of credit; or,

[] (5) an irrevocable letter of credit for 10 percent of the total contract price with a monitoring and disbursements agreement with the IHA (applicable only to contracts awarded by an IHA under the Indian Housing Program).

(b) Bonds must be obtained from guarantee or surety companies acceptable to the U.S. Government and authorized to do business in the state where the work is to be performed. Individual sureties will not be considered. U.S. Treasury Circular Number 570, published annually in the Federal Register, lists companies approved to act as sureties on bonds securing Government contracts, the maximum underwriting limits on each contract bonded, and the States in which the company is licensed to do business. Use of companies listed in this circular is mandatory. Copies of the circular may be downloaded on the U.S. Department of Treasury website <http://www.fms.treas.gov/c570/index.html>, or ordered for a minimum fee by contacting the Government Printing Office at (202) 512-2168.

(c) Each bond shall clearly state the rate of premium and the total amount of premium charged. The current power of attorney for the person who signs for the surety company must be attached to the bond. The effective date of the power of attorney shall not precede the date of the bond. The effective date of the bond shall be on or after the execution date of the contract.

(d) Failure by the successful bidder to obtain the required assurance of completion within the time specified, or within such extended period as the PHA/IHA may grant based upon reasons determined adequate by the PHA/IHA, shall render the bidder ineligible for award. The PHA/IHA may then either award the contract to the next lowest responsible bidder or solicit new bids. The PHA/IHA may retain the ineligible bidder's bid guarantee.

11. Preconstruction Conference (applicable to construction contracts)

After award of a contract under this solicitation and prior to the start of work, the successful bidder will be required to attend a preconstruction conference with representatives of the PHA/IHA and its architect/engineer, and other interested parties convened by the PHA/IHA. The conference will serve to acquaint the participants with the general plan of the construction operation and all other requirements of the contract (e.g., Equal Employment Opportunity, Labor Standards). The PHA/IHA will provide the successful bidder with the date, time, and place of the conference.

12. Indian Preference Requirements (applicable only if this solicitation is for a contract to be performed on a project for an Indian Housing Authority)

(a) HUD has determined that the contract awarded under this solicitation is subject to the requirements of section 7(b) of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450e(b)). Section 7(b) requires that any contract or subcontract entered into for the benefit of Indians shall require that, to the greatest extent feasible

(1) Preferences and opportunities for training and employment (other than core crew positions; see paragraph (h) below) in connection with the administration of such contracts or subcontracts be given to qualified "Indians." The Act defines "Indians" to mean persons who are members of an Indian tribe and defines "Indian tribe" to mean any Indian tribe, band, nation, or other organized group or community, including any Alaska Native village or regional or village corporation as defined in or established pursuant to the Alaska Native Claims Settlement Act, which is recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians; and,

(2) Preference in the award of contracts or subcontracts in connection with the administration of contracts be given to Indian organizations and to Indian-owned economic enterprises, as defined in section 3 of the Indian Financing Act of 1974 (25 U.S.C. 1452). That Act defines "economic enterprise" to mean any Indian-owned commercial, industrial, or business activity established or organized for the purpose of profit, except that the Indian ownership must constitute not less than 51 percent of the enterprise; "Indian organization" to mean the governing body of any Indian tribe or entity established or recognized by such governing body; "Indian" to mean any person who is a member of any tribe, band, group, pueblo, or community which is recognized by the Federal Government as eligible for services from the Bureau of Indian Affairs and any "Native" as defined in the Alaska Native Claims Settlement Act; and Indian "tribe" to mean any Indian tribe, band, group, pueblo, or community including Native villages and Native groups (including

corporations organized by Kenai, Juneau, Sitka, and Kodiak) as defined in the Alaska Native Claims Settlement Act, which is recognized by the Federal Government as eligible for services from the Bureau of Indian Affairs.

(b) (1) The successful Contractor under this solicitation shall comply with the requirements of this provision in awarding all subcontracts under the contract and in providing training and employment opportunities.

(2) A finding by the IHA that the contractor, either (i) awarded a subcontract without using the procedure required by the IHA, (ii) falsely represented that subcontracts would be awarded to Indian enterprises or organizations; or, (iii) failed to comply with the contractor's employment and training preference bid statement shall be grounds for termination of the contract or for the assessment of penalties or other remedies.

(c) If specified elsewhere in this solicitation, the IHA may restrict the solicitation to qualified Indian-owned enterprises and Indian organizations. If two or more (or a greater number as specified elsewhere in the solicitation) qualified Indian-owned enterprises or organizations submit responsive bids, award shall be made to the qualified enterprise or organization with the lowest responsive bid. If fewer than the minimum required number of qualified Indian-owned enterprises or organizations submit responsive bids, the IHA shall reject all bids and readvertise the solicitation in accordance with paragraph (d) below.

(d) If the IHA prefers not to restrict the solicitation as described in paragraph (c) above, or if after having restricted a solicitation an insufficient number of qualified Indian enterprises or organizations submit bids, the IHA may advertise for bids from non-Indian as well as Indian-owned enterprises and Indian organizations. Award shall be made to the qualified Indian enterprise or organization with the lowest responsive bid if that bid is -

(1) Within the maximum HUD-approved budget amount established for the specific project or activity for which bids are being solicited; and

(2) No more than the percentage specified in 24 CFR 905.175(c) higher than the total bid price of the lowest responsive bid from any qualified bidder. If no responsive bid by a qualified Indian-owned economic enterprise or organization is within the stated range of the total bid price of the lowest responsive bid from any qualified enterprise, award shall be made to the bidder with the lowest bid.

(e) Bidders seeking to qualify for preference in contracting or subcontracting shall submit proof of Indian ownership with their bids. Proof of Indian ownership shall include but not be limited to:

(1) Certification by a tribe or other evidence that the bidder is an Indian. The IHA shall accept the certification of a tribe that an individual is a member.

(2) Evidence such as stock ownership, structure, management, control, financing and salary or profit sharing arrangements of the enterprise.

(f) (1) All bidders must submit with their bids a statement describing how they will provide Indian preference in the award of subcontracts. The specific requirements of that statement and the factors to be used by the IHA in determining the statement's adequacy are included as an attachment to this solicitation. Any bid that fails to include the required statement shall be rejected as nonresponsive. The IHA may require that comparable statements be provided by subcontractors to the successful Contractor, and may require the Contractor to reject any bid or proposal by a subcontractor that fails to include the statement.

(2) Bidders and prospective subcontractors shall submit a certification (supported by credible evidence) to the IHA in any instance where the bidder or subcontractor believes it is infeasible to provide Indian preference in subcontracting. The acceptance or rejection by the IHA of the certification shall be final. Rejection shall disqualify the bid from further consideration.

(g) All bidders must submit with their bids a statement detailing their employment and training opportunities and their plans to provide preference to Indians in implementing the contract; and the number or percentage of Indians anticipated to be employed and trained. Comparable statements from all proposed subcontractors must be submitted. The criteria to be used by the IHA in determining the statement(s)'s adequacy are included as an attachment to this solicitation. Any bid that fails to include the required statement(s), or that includes a statement that does not meet minimum standards required by the IHA shall be rejected as nonresponsive.

(h) Core crew employees. A core crew employee is an individual who is a bona fide employee of the contractor at the time the bid is submitted; or an individual who was not employed by the bidder at the time the bid was submitted, but who is regularly employed by the bidder in a supervisory or other key skilled position when work is available. Bidders shall submit with their bids a list of all core crew employees.

(i) Preference in contracting, subcontracting, employment, and training shall apply not only on-site, on the reservation, or within the IHA's jurisdiction, but also to contracts with firms that operate outside these areas (e.g., employment in modular or manufactured housing construction facilities).

(j) Bidders should contact the IHA to determine if any additional local preference requirements are applicable to this solicitation.

(k) The IHA ☐ does ☐ does not [Contracting Officer check applicable box] maintain lists of Indian-owned economic enterprises and Indian organizations by specialty (e.g., plumbing, electrical, foundations), which are available to bidders to assist them in meeting their responsibility to provide preference in connection with the administration of contracts and subcontracts.

**SECTION 00 2113
SUPPLEMENTAL INSTRUCTIONS TO BIDDERS**

FORM OF INSTRUCTIONS TO BIDDERS

- 1.01 SEE REPRESENTATIONS CERTIFICATIONS AND OTHER STATEMENTS OF BIDDERS", HUD FORM 5369 BOUND IN THE PROJECT MANUAL.**
- 1.02 THE FOLLOWING MODIFY, CHANGE, DELETE FROM, OR ADD TO THE "REPRESENTATIONS CERTIFICATIONS AND OTHER STATEMENTS OF BIDDERS", HUD FORM 5369. WHERE ANY ARTICLE OF THE GENERAL CONDITIONS IS MODIFIED, OR ANY PARAGRAPH, SUBPARAGRAPH, OR CLAUSE THEREOF IS MODIFIED OR DELETED HEREIN, THE UNALTERED PROVISIONS OF THE ARTICLE, PARAGRAPH, SUBPARAGRAPH, OR CLAUSE SHALL REMAIN IN EFFECT.**
- A. ARTICLE 7: SERVICE OF PROTEST**
1. Modify Clause (b); Add " Mr. Michael Washowich, Executive Director, Westmoreland County Housing Authority."
- B. ARTICLE 10: ASSURANCE OF COMPLETION**
1. Subparagraph 10. (a) as follows:
 - a. Provide separate Performance, Payment and Maintenance Bonds, each in the amount of 100% of the Contract Price.
- C. NOTICE TO PROCEED - CONSTRUCTION COMPLETION TIME**
1. All work shall be fully completed not later than One Hundred Forty (140) consecutive calendar days from the written "Notice to Proceed".
 2. CONSTRUCTION START DATE SHALL BE AS STATED IN A WRITTEN "NOTICE TO PROCEED".
- D. BID FORM**
1. Submit only (1) original signed copy of the bid, bid guarantee and attachments.
 2. Submit a supplemental Schedule of Values with the Form of Proposal. The Schedule of Values shall form the basis of the Lump Sum Bid and shall contain as line items amounts reflecting General Conditions, Work items, Overhead and Profit identified. The Schedule of Values should reflect amounts for each of the technical specification sections beginning at Division 02.
 3. If a potential Low Bidder elects to withdraw their bid due to a "Mathematical Error," the Schedule of Values shall be used to fully evaluate the "Mathematical Error."
- E. BID GUARANTEE**
1. All bid must be accompanied by a negotiable bid guarantee, which shall not be less than ten percent (10%) of the amount of the bid.
- F. PROOF OF COMPETENCY BIDDER**
1. All bidders are required to complete the "Statement of Bidder's Qualifications" form included as part of the Contract Documents to provide evidence satisfactory to the Owner that he and his proposed subcontractors have sufficient means and experience, in the types of work called for, to assure completion of the Contract in a satisfactory manner.
- G. EXAMINATION OF DOCUMENTS AND SITE OF WORK**
1. Before submitting a bid, each bidder shall examine the Drawings carefully, shall read the Specifications and all other proposed Contract Documents and shall visit the subject site where the work is to be performed.
 2. Interested Contractors are urged to attend the pre-bid conference, which will be held on October 16, 2025 at 1:00 PM Meeting location will be at project site.

3. Each bidder shall fully inform himself prior to bidding as to existing conditions and limitations under which the work is to be performed and shall include in his bid a sum to cover the cost of items necessary to perform the Work as set forth in the proposed Contract Documents. No allowance will be made to a bidder because of such examination or knowledge. The submission of a bid will be considered as conclusive evidence that the bidder has made such examination.
- H. EXECUTION OF AGREEMENT
1. The form of Agreement which the successful bidder will be required to execute is included in the Project Manual.
 2. The bidder to whom the Contract is awarded shall, within ten (10) calendar days after notice of award and receipt of Agreement forms from Westmoreland County Housing Authority, sign and deliver required copies to Westmoreland County Housing Authority.
 3. At or prior to delivery of the signed Agreement, the bidder to whom the Contract is awarded shall deliver to Westmoreland County Housing Authority those Certificates of Insurance required the Contract Documents and such Assurance of Completion (Bonds) as are required by Westmoreland County Housing Authority.
 4. Bonds and Certificates of Insurance shall be approved by Westmoreland County Housing Authority before the successful bidder proceeds with the Work. Failure or refusal to provide Bonds or Certificates of Insurance in a form satisfactory to Westmoreland County Housing Authority shall subject the successful bidder to loss of time from the allowable construction period equal to the time of delay in furnishing the required material.
- I. INTERPRETATION OF CONTRACT DOCUMENTS PRIOR TO BIDDING
1. If any person contemplating submitting a bid for construction of the Work is in doubt as to the true meaning of any part of the proposed Contract Documents, or finds discrepancies in or omissions from any part of the proposed Contract Documents, he may submit to the Architect a written request for interpretation thereof not later than ten (10) days prior to the bid opening date. The person submitting the request shall be responsible for its prompt delivery.
- J. CONSTRUCTION TIME AND LIQUIDATED DAMAGES
1. The Agreement will include a stipulation that the Work be completed as stipulated in a written Notice to Proceed.
 2. The General Conditions include a stipulation that liquidated damages will be established in the amount of \$250.00 per calendar day for each calendar day after the agreed completion date that the Work is not fully certified by the Architect as being Substantially Complete as that stage of completion is defined in the Conditions of the Contract.
- K. CERTIFICATE OF BIDDER REGARDING EQUAL EMPLOYMENT OPPORTUNITY
1. All bidders are required to submit with their bid a complete EEO certificate on the form provided in the Project Manual.
- L. STIPULATION AGAINST LIENS
1. The successful bidder will be required to execute a "No Lien Agreement" on the form provided in the Project Manual.
- M. INSURANCE
1. The successful bidder will be required to carry the insurance specified in the General Conditions.
 2. All Contractors' insurance policies shall name Westmoreland County Housing Authority and Canzian/Johnston & Associates, LLC as additional insured.
- N. SECTION 3 CERTIFICATION
1. All bidders are required to submit with their bid a completed Section 3 Certification on the form provided in the Project Manual.
- O. AWARD OR REJECTION OF BIDS

1. The Contract, if awarded, will be awarded to the responsible bidder who has produced the lowest bid price subject to Westmoreland County Housing Authority's right to reject any and all bids; Westmoreland County Housing Authority reserves the sole right on multi site projects, to award a contract or contracts to one or more bidder(s) either cumulatively or per each site as may be in the Westmoreland County Housing Authority's best interest, to waive defects or any informality in bids; and to accept or reject any part of any bid if, in their judgment, the best interests of the Authority are thereby served. All sites may not be awarded.

P. REQUIRED FORMS FOR BIDDING

1. In order for the bid to be considered complete and responsive, the following forms must be fully completed and must be submitted with the Bid Form.
 - a. Form of Proposal
 - b. Bid Bond or other bid security as specified in the Invitation for Bids.
 - c. Non-Collusive Affidavit.
 - d. Representations, Certifications, and Other Statements of Bidders (HUD 5369-A)
 - e. Certificate of Bidder Regarding Equal Employment Opportunity
 - f. Previous Participation Certification (HUD 2530)
 - g. Statement of Bidder's Qualifications.
 - h. Section 3 Certification
 - i. Certification of Bidder
 - j. Schedule of Values

END OF SUPPLEMENTAL INSTRUCTIONS TO REPRESENTATIONS

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SECTION 00 2114
HUD 5369-A REPRESENTATIONS, CERTIFICATIONS, AND OTHER STATEMENTS OF BIDDERS
FORM OF REPRESENTATIONS, CERTIFICATIONS, AND OTHER STATEMENTS OF BIDDERS
1.01 THE REPRESENTATIONS, CERTIFICATIONS, AND OTHER STATEMENTS OF BIDDERS
APPLICABLE TO THIS CONTRACT IS ATTACHED FOLLOWING THIS PAGE.

END OF SECTION

2335	HUD 5369-A Representations, Certifications, and Other Statements of Bidders	00 2114 - 1
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**U.S. Department of Housing
and Urban Development**
Office of Public and Indian Housing

**Representations, Certifications,
and Other Statements of Bidders**
Public and Indian Housing Programs

Representations, Certifications, and Other Statements of Bidders

Public and Indian Housing Programs

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1. Certificate of Independent Price Determination

(a) The bidder certifies that--

(1) The prices in this bid have been arrived at independently, without, for the purpose of restricting competition, any consultation, communication, or agreement with any other bidder or competitor relating to (i) those prices, (ii) the intention to submit a bid, or (iii) the methods or factors used to calculate the prices offered;

(2) The prices in this bid have not been and will not be knowingly disclosed by the bidder, directly or indirectly, to any other bidder or competitor before bid opening (in the case of a sealed bid solicitation) or contract award (in the case of a competitive proposal solicitation) unless otherwise required by law; and

(3) No attempt has been made or will be made by the bidder to induce any other concern to submit or not to submit a bid for the purpose of restricting competition.

(b) Each signature on the bid is considered to be a certification by the signatory that the signatory--

(1) Is the person in the bidder's organization responsible for determining the prices being offered in this bid or proposal, and that the signatory has not participated and will not participate in any action contrary to subparagraphs (a)(1) through (a)(3) above; or

(2) (i) Has been authorized, in writing, to act as agent for the following principals in certifying that those principals have not participated, and will not participate in any action contrary to subparagraphs (a)(1) through (a)(3) above.

[insert full name of person(s) in the bidder's organization responsible for determining the prices offered in this bid or proposal, and the title of his or her position in the bidder's organization];

(ii) As an authorized agent, does certify that the principals named in subdivision (b)(2)(i) above have not participated, and will not participate, in any action contrary to subparagraphs (a)(1) through (a)(3) above; and

(iii) As an agent, has not personally participated, and will not participate in any action contrary to subparagraphs (a)(1) through (a)(3) above.

(c) If the bidder deletes or modifies subparagraph (a)2 above, the bidder must furnish with its bid a signed statement setting forth in detail the circumstances of the disclosure.

[] [Contracting Officer check if following paragraph is applicable]

(d) Non-collusive affidavit. (applicable to contracts for construction and equipment exceeding \$50,000)

(1) Each bidder shall execute, in the form provided by the PHA/IHA, an affidavit to the effect that he/she has not colluded with any other person, firm or corporation in regard to any bid submitted in response to this solicitation. If the successful bidder did not submit the affidavit with his/her bid, he/she must submit it within three (3) working days of bid opening. Failure to submit the affidavit by that date may render the bid nonresponsive. No contract award will be made without a properly executed affidavit.

(2) A fully executed "Non-collusive Affidavit" [] is, [] is not included with the bid.

2. Contingent Fee Representation and Agreement

(a) Definitions. As used in this provision:

"Bona fide employee" means a person, employed by a bidder and subject to the bidder's supervision and control as to time, place, and manner of performance, who neither exerts, nor proposes to exert improper influence to solicit or obtain contracts nor holds out as being able to obtain any contract(s) through improper influence.

"Improper influence" means any influence that induces or tends to induce a PHA/IHA employee or officer to give consideration or to act regarding a PHA/IHA contract on any basis other than the merits of the matter.

(b) The bidder represents and certifies as part of its bid that, except for full-time bona fide employees working solely for the bidder, the bidder:

(1) [] has, [] has not employed or retained any person or company to solicit or obtain this contract; and

(2) [] has, [] has not paid or agreed to pay to any person or company employed or retained to solicit or obtain this contract any commission, percentage, brokerage, or other fee contingent upon or resulting from the award of this contract.

(c) If the answer to either (a)(1) or (a)(2) above is affirmative, the bidder shall make an immediate and full written disclosure to the PHA/IHA Contracting Officer.

(d) Any misrepresentation by the bidder shall give the PHA/IHA the right to (1) terminate the contract; (2) at its discretion, deduct from contract payments the amount of any commission, percentage, brokerage, or other contingent fee; or (3) take other remedy pursuant to the contract.

3. Certification and Disclosure Regarding Payments to Influence Certain Federal Transactions (applicable to contracts exceeding \$100,000)

(a) The definitions and prohibitions contained in Section 1352 of title 31, United States Code, are hereby incorporated by reference in paragraph (b) of this certification.

(b) The bidder, by signing its bid, hereby certifies to the best of his or her knowledge and belief as of December 23, 1989 that:

(1) No Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress on his or her behalf in connection with the awarding of a contract resulting from this solicitation;

(2) If any funds other than Federal appropriated funds (including profit or fee received under a covered Federal transaction) have been paid, or will be paid, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress on his or her behalf in connection with this solicitation, the bidder shall complete and submit, with its bid, OMB standard form LLL, "Disclosure of Lobbying Activities;" and

(3) He or she will include the language of this certification in all subcontracts at any tier and require that all recipients of subcontract awards in excess of \$100,000 shall certify and disclose accordingly.

(c) Submission of this certification and disclosure is a prerequisite for making or entering into this contract imposed by section 1352, title 31, United States Code. Any person who makes an expenditure prohibited under this provision or who fails to file or amend the disclosure form to be filed or amended by this provision, shall be subject to a civil penalty of not less than \$10,000, and not more than \$100,000, for each such failure.

(d) Indian tribes (except those chartered by States) and Indian organizations as defined in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450B) are exempt from the requirements of this provision.

4. Organizational Conflicts of Interest Certification

The bidder certifies that to the best of its knowledge and belief and except as otherwise disclosed, he or she does not have any organizational conflict of interest which is defined as a situation in which the nature of work to be performed under this proposed contract and the bidder's organizational, financial, contractual, or other interests may, without some restriction on future activities:

- (a) Result in an unfair competitive advantage to the bidder; or,
 - (b) Impair the bidder's objectivity in performing the contract work.
- [] In the absence of any actual or apparent conflict, I hereby certify that to the best of my knowledge and belief, no actual or apparent conflict of interest exists with regard to my possible performance of this procurement.

5. Bidder's Certification of Eligibility

(a) By the submission of this bid, the bidder certifies that to the best of its knowledge and belief, neither it, nor any person or firm which has an interest in the bidder's firm, nor any of the bidder's subcontractors, is ineligible to:

(1) Be awarded contracts by any agency of the United States Government, HUD, or the State in which this contract is to be performed; or,

(2) Participate in HUD programs pursuant to 24 CFR Part 24.

(b) The certification in paragraph (a) above is a material representation of fact upon which reliance was placed when making award. If it is later determined that the bidder knowingly rendered an erroneous certification, the contract may be terminated for default, and the bidder may be debarred or suspended from participation in HUD programs and other Federal contract programs.

6. Minimum Bid Acceptance Period

(a) "Acceptance period," as used in this provision, means the number of calendar days available to the PHA/IHA for awarding a contract from the date specified in this solicitation for receipt of bids.

(b) This provision supersedes any language pertaining to the acceptance period that may appear elsewhere in this solicitation.

(c) The PHA/IHA requires a minimum acceptance period of [Contracting Officer insert time period] calendar days.

(d) In the space provided immediately below, bidders may specify a longer acceptance period than the PHA's/IHA's minimum requirement. The bidder allows the following acceptance period: calendar days.

(e) A bid allowing less than the PHA's/IHA's minimum acceptance period will be rejected.

(f) The bidder agrees to execute all that it has undertaken to do, in compliance with its bid, if that bid is accepted in writing within (1) the acceptance period stated in paragraph (c) above or (2) any longer acceptance period stated in paragraph (d) above.

7. Small, Minority, Women-Owned Business Concern Representation

The bidder represents and certifies as part of its bid/ offer that it --

(a) [] is, [] is not a small business concern. "Small business concern," as used in this provision, means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding, and qualified as a small business under the criteria and size standards in 13 CFR 121.

(b) [] is, [] is not a women-owned business enterprise. "Women-owned business enterprise," as used in this provision, means a business that is at least 51 percent owned by a woman or women who are U.S. citizens and who also control and operate the business.

(c) [] is, [] is not a minority business enterprise. "Minority business enterprise," as used in this provision, means a business which is at least 51 percent owned or controlled by one or more minority group members or, in the case of a publicly owned business, at least 51 percent of its voting stock is owned by one or more minority group members, and whose management and daily operations are controlled by one or more such individuals. For the purpose of this definition, minority group members are:

(Check the block applicable to you)

- | | |
|------------------------|------------------------------|
| [] Black Americans | [] Asian Pacific Americans |
| [] Hispanic Americans | [] Asian Indian Americans |
| [] Native Americans | [] Hasidic Jewish Americans |

8. Indian-Owned Economic Enterprise and Indian Organization Representation (applicable only if this solicitation is for a contract to be performed on a project for an Indian Housing Authority)

The bidder represents and certifies that it:

(a) [] is, [] is not an Indian-owned economic enterprise. "Economic enterprise," as used in this provision, means any commercial, industrial, or business activity established or organized for the purpose of profit, which is at least 51 percent Indian owned. "Indian," as used in this provision, means any person who is a member of any tribe, band, group, pueblo, or community which is recognized by the Federal Government as eligible for services from the Bureau of Indian Affairs and any "Native" as defined in the Alaska Native Claims Settlement Act.

(b) [] is, [] is not an Indian organization. "Indian organization," as used in this provision, means the governing body of any Indian tribe or entity established or recognized by such governing body. Indian "tribe" means any Indian tribe, band, group, pueblo, or

community including Native villages and Native groups (including corporations organized by Kenai, Juneau, Sitka, and Kodiak) as defined in the Alaska Native Claims Settlement Act, which is recognized by the Federal Government as eligible for services from the Bureau of Indian Affairs.

9. Certification of Eligibility Under the Davis-Bacon Act (applicable to construction contracts exceeding \$2,000)

(a) By the submission of this bid, the bidder certifies that neither it nor any person or firm who has an interest in the bidder's firm is a person or firm ineligible to be awarded contracts by the United States Government by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(b) No part of the contract resulting from this solicitation shall be subcontracted to any person or firm ineligible to be awarded contracts by the United States Government by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(c) The penalty for making false statements is prescribed in the U. S. Criminal Code, 18 U.S.C. 1001.

10. Certification of Nonsegregated Facilities (applicable to contracts exceeding \$10,000)

(a) The bidder's attention is called to the clause entitled **Equal Employment Opportunity** of the General Conditions of the Contract for Construction.

(b) "Segregated facilities," as used in this provision, means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees, that are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, or national origin because of habit, local custom, or otherwise.

(c) By the submission of this bid, the bidder certifies that it does not and will not maintain or provide for its employees any segregated facilities at any of its establishments, and that it does not and will not permit its employees to perform their services at any location under its control where segregated facilities are maintained. The bidder agrees that a breach of this certification is a violation of the Equal Employment Opportunity clause in the contract.

(d) The bidder further agrees that (except where it has obtained identical certifications from proposed subcontractors for specific time periods) prior to entering into subcontracts which exceed \$10,000 and are not exempt from the requirements of the Equal Employment Opportunity clause, it will:

(1) Obtain identical certifications from the proposed subcontractors;

(2) Retain the certifications in its files; and

(3) Forward the following notice to the proposed subcontractors (except if the proposed subcontractors have submitted identical certifications for specific time periods):

Notice to Prospective Subcontractors of Requirement for Certifications of Nonsegregated Facilities

A Certification of Nonsegregated Facilities must be submitted before the award of a subcontract exceeding \$10,000 which is not exempt from the provisions of the Equal Employment Opportunity clause of the prime contract. The certification may be submitted either for each subcontract or for all subcontracts during a period (i.e., quarterly, semiannually, or annually).

Note: The penalty for making false statements in bids is prescribed in 18 U.S.C. 1001.

11. Clean Air and Water Certification (applicable to contracts exceeding \$100,000)

The bidder certifies that:

(a) Any facility to be used in the performance of this contract [] is, [] is not listed on the Environmental Protection Agency List of Violating Facilities:

(b) The bidder will immediately notify the PHA/IHA Contracting Officer, before award, of the receipt of any communication from the Administrator, or a designee, of the Environmental Protection Agency, indicating that any facility that the bidder proposes to use for the performance of the contract is under consideration to be listed on the EPA List of Violating Facilities; and,

(c) The bidder will include a certification substantially the same as this certification, including this paragraph (c), in every nonexempt subcontract.

12. LIST OF REFERENCES

(a) LIST OF REFERENCES – The contractor must provide a minimum of five (5) references. References for residential buildings are beneficial as well as jobs that are funded by governmental monies. If you do not have experience in residential or governmental, you must provide a minimum of five (5) references of other construction jobs with your bid or it will be disqualified. The references should include a contact person and telephone number of the establishment who received the work. References from other contractors are not acceptable and could result in disqualification.

13. Bidder's Signature

The bidder hereby certifies that the information contained in these certifications and representations is accurate, complete, and current.

(Signature and Date)

(Typed or Printed Name)

(Title)

(Company Name)

(Company Address)

**SECTION 00 4210
FORM OF PROPOSAL**

RECEIPT OF BIDS: **WESTMORELAND COUNTY HOUSING AUTHORITY**
 167 SOUTH GREENGATE ROAD
 GREENSBURG, PENNSYLVANIA 15601

BID RECEIVED UNTIL: **NOVEMBER 3, 2025 AT 10:00 A.M.**

BID OPENING: **WESTMORELAND COUNTY HOUSING AUTHORITY**
 167 SOUTH GREENGATE ROAD
 GREENSBURG, PENNSYLVANIA 15601

BID OPENING TIME: **NOVEMBER 3, 2025 AT 10:00 A.M. (PREVAILING TIME)**

ARCHITECT PROJECT NO: **2335**

Proposal of _____ hereinafter called "Bidder",
organized and existing under the laws of the State of _____ doing business
as _____ (Corporation, Partnership, or Individual).

To the Westmoreland County Housing Authority:

The Bidder, in compliance with your invitation for bids for the Troutmans Building Exterior Renovations (Roof and Masonry) located 200 South Main Street, Greensburg, PA 15601 having thoroughly examined the Contract Documents, related documents, and the site(s) of the proposed work, and being familiar with all of the conditions surrounding the construction of the proposed Project including the availability of materials and labor, hereby proposes to furnish all labor, materials, and supplies, and to construct the Project in accordance with the Contract Documents within the time set forth therein, and at the prices stated below. Bidder acknowledges that the Drawings and Specifications are intended only to show the intent of the completed Project. Bidder represents that it is qualified to construct the Project as depicted in the Contract Documents and to determine its own means, methods, techniques, sequences and procedures. To the extent that means, methods, techniques, sequences and procedures are identified in the Contract documents, Bidder is required to independently evaluate those means, methods, techniques sequences and procedures for the purpose of determining whether the means, methods, techniques, sequences and procedures depicted in the Contract Documents are adequate to construct the Project. Bidder further represents that it has based its bid upon its own determination of the means, methods, techniques, sequences and procedures required to construct the Project. The prices are to cover all expenses incurred in performing the work under the Contract Documents, of which this proposal is a part.

Bidder hereby agrees to commence work under this Contract as stipulated in a written "Notice To Proceed" and to fully complete the Project as stipulated in Section 01 1000 - Summary

Bidder further agrees to pay as liquidated damages, the sum of Two Hundred Fifty Dollars (\$250.00) as provided in Section 01 0220 (01022) - Liquidated Damages.

Bidder acknowledges receipt of the following addendum:

Addendum No. _____ Issue Date _____
Addendum No. _____ Issue Date _____
Addendum No. _____ Issue Date _____
Addendum No. _____ Issue Date _____

This Proposal is for _____ Construction.
(General Roofing or General Masonry Repair)

BASE PROPOSAL

- A. The Bidder agrees to perform all of the construction work described in the Specifications and shown on the Drawings for the sum of _____ Dollars
(\$ _____)

ALTERNATES

- A. General Masonry Repair - Alternate No. 1: Should the Owner decide to proceed with the portion of work identified as "Alternate No. 1", Delete from the Base Bid the sum of _____ Dollars
(\$ _____)
- B. General Masonry Repair - Alternate No. 2: Should the Owner decide to proceed with the portion of work identified as "Alternater No. 2", Delete from the Base Bid the sum of _____ Dollars
(\$ _____)

(Amounts shall be shown in both workds and figures. In case of discrepancy, the amount shown in words will govern.)

Submission of a bid by the Bidder is a representation that the Bidder has thoroughly reviewed and evaluated the Contract Documents to determine whether the Bidder needs clarification of the Contract Documents or additional interpretation of the intent of the Contract Documents to determine the bid and that the Bidder has requested any needed clarification prior to submitting the bid. Bidder represents that the Bidder has the knowledge, skill and expertise to perform the work depicted in the Contract Documents; that the Bidder understands that the Bidder must make reasonable inferences to determine portions of the work not shown in the Contract Documents that would be required for a proper and complete project, and the Bidder has included all costs for such inferences in the bid; and, that Bidder is not relying on representations from the Contract Documents for the purpose of determining the means, methods, sequences or procedures of performing the work.

The Bidder understands that the Westmoreland County Housing Authority reserves the right to reject any or all bids and to waive any informality in the bidding.

The Bidder agrees that this bid shall be valid and may not be withdrawn for a period of Sixty (60) calendar days after the scheduled time for receiving and opening bids.

Upon receipt of written notice of acceptance of the Bid, the Bidder will execute the formal Contract attached within ten (10) days and deliver a Surety Bond or Bonds as required by the Contract Documents.

Respectfully submitted,

(_____)
(_____)

CORPORATE SEAL

If Any

(_____)
(_____)
(_____)

BIDDER

By _____

Sign in Blue ink

Title _____

Address _____

Bid dated this _____ day of _____, 2025.
Area code and Telephone number _____
Federal E.I.N. _____

END OF SECTION

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**SECTION 00 5000
CONTRACT**

1.01 FORM OF CONTRACT:

THIS AGREEMENT MADE THIS _____ day of _____ in the year Two Thousand Twenty-Five by and between the _____, a Corporation, Partnership or Sole Proprietorship existing under the laws of the State of Pennsylvania, hereinafter called the "Contractor" and the Westmoreland County Housing Authority, hereinafter called "HA."

WITNESSETH, THAT THE CONTRACTOR AND HA FOR THE CONSIDERATION STATED HEREIN MUTUALLY AGREE AS FOLLOWS:

ARTICLE I

Statement of Work. The Contractor shall furnish all labor, material, equipment, and services to perform and complete all work required for the Troutmans Building Exterior Renovations (Roof and Masonry) located at 200 South Main Street, Greensburg, PA 15601 , Contract, in strict accordance with the Specifications, and Addenda thereto, Numbered ____ and the drawings referred to herein, all as prepared by Canzian/Johnston & Associates, LLC, which said Specifications and Drawings are incorporated herein by reference and made part hereof.

ARTICLE II

The HA shall pay the Contractor for the performance of the Contract, in current funds, subject to additions and deductions as provided in the Specifications for completed work meeting the requirements of the Contract Documents, the sum of _____ Dollars (\$ _____).

ARTICLE III

Contractor agrees that time is of the essence in the completion of the work in the time required by this contract and hereby waives any notice of putting in default for failure to complete in time.

ARTICLE IV

Contract Documents. The Contract shall consist of the following component parts:

1. This Instrument
2. General Conditions
3. Special / Supplemental Conditions
4. Technical Specifications
5. Drawing(s)

This instrument, together with the documents enumerated in this ARTICLE IV, which said other documents are as fully as part of the Contract as if hereto attached or herein repeated, form the Contract. In event that any provision in any component part of the Contract conflict with any provision of any other component part, the provision of the component part first enumerated in this ARTICLE IV shall govern, except as otherwise specifically stated. The various provisions in Addenda shall be construed in the order of preference of the component part of the Contract which each modified.

WESTMORELAND COUNTY HOUSING AUTHORITY

Witness

BY _____
Contractor/Title

I, _____, Certify that I am the
 _____ (Title) of the Corporation names as Contractor herein, and
 that _____ (Name of Signatory) who signed the Contract on
 behalf of the Contracator, was then the _____ (Title of Signatory) of said Corporation; that
 said Contract was duly signed for and in behalf of said Corporation by authority of its governing
 body, and is within the scope of its corporate powers.

(Signature of Person Affixing the Corporate Seal)

2335	Contract	00 5000 - 2
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**SECTION 00 6000
PROJECT FORMS**

NON-COLLUSION AFFIDAVIT

State of _____

:s.s.

County of _____

_____, being first
duly sworn, deposes and says:

(a partner or officer of the firm of , etc.)

proposal or bid, that such proposal or bid is genuine and not collusive or sham; that said bidder has not colluded, conspired, connived or agreed, directly or indirectly, with any bidder or person, to put in a sham bid or to refrain from bidding, and has not in any manner, directly or indirectly, sought by agreement or collusion, or communication or conference, with any person, to fix the bid price of affiant or of any other bidder, or to fix nay overhead, profit or cost element of said bid price, or of that of any other bidder, or the secure any advantage against the Westmoreland County Housing Authority or any person interested in the proposed contract; and that all statements in said proposal or bid are true.

(Firm Name)

By _____

Title _____

Signature of:

Owner if the bidder is an individual

Partner if the bidder is a partnership

Office if the bidder is a corporation

SWORN TO AND SUBSCRIBED BEFORE ME THIS

_____ DAY OF _____; 2025

_____ My Commission Expires _____

Notary Public

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned _____ as Principal, and _____ as Surety, are held and firmly bound unto the Westmoreland County Housing Authority, hereinafter called the "Housing Authority", in the penal sum of _____ Dollars, lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by thee presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the Principal has submitted the accompanying bid dated _____, 2025 for Troutmans Building Exterior Renovations (Roof and Masonry) located at 200 South Main Street, Greensburg, PA 15601.

NOW, THEREFORE, if the Principal shall not withdraw said bid within the period specified therein after the opening of the same, or if no period be specified, within sixty (60) days after the said opening, and shall within the period specified therefor, or, if no period be specified, within ten (10) days after the prescribed forms are presented to him for signature, enter into a written contract with the Housing Authority in accordance with the bid as accepted, and give bond with good and sufficient surety or sureties, as may be required, for the faithful performance and proper fulfillment of such contract; or in the event of withdrawal of said bid within the period specified, or the failure to enter into such contract and give such bond within the time specified, if the Principal shall pay Housing Authority the difference between the amount specified in said bid and the amount for which the Housing Authority may procure the required work or supplies or both, if the latter amount be in excess of the former, then the above obligation shall be void and of no effect, otherwise to remain in full force and virtue.

IN WITNESS WHEREOF, the above-burden parties have executed this instrument under their several seals this _____ day of _____, 2025, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

In presence of:

(Witness) By: _____
(Title)

(Bonding Company Name)

(Address)

(Witness) By: _____
(Attorney-in-Fact)

IMPORTANT! SURETY COMPANIES EXECUTIGN BONDS MUST APPEAR ON THE U.S. TREASURY DEPARTMENT'S MOST CURRENT LIST (CIRCULAR 580 AS AMENDED) AND BE AUTHORIZED TO TRANSACT BUSINESS IN PENNSYLVANIA.

BID BOND - CERTIFIED OR CASHIER'S CHECK

THIS FORM TO BE SUBMITTED WHERE CERTIFIED OR CASHIER'S CHECK IS USED IN LIEU OF BID BOND.

KNOW ALL MEN BY THESE PRESENTS, that, the undersigned _____ as Principal is hereby held and firmly bound unto the Westmoreland County Housing Authority as Owner in the penal sum of _____ for the payment of which, well and truly to be made, we hereby bind ourselves, our heirs, executors, administrators, successors, and assigns.

Signed this _____ day of _____, 2025.

The Condition of the above obligation is such that whereas the Principal has submitted to _____ a certain Bid, attached hereto and hereby made apart hereof to enter into a Contract in writing, for the Troutmans Building Exterior Renovations (Roof and Masonry).

NOW, THEREFORE,

(a) If said Bid shall be rejected, or in the alternate,

(b) If said Bid shall be accepted and the Principal shall execute and deliver a Contract in the form of Contract attached hereto (properly completed in accordance with said Bid) and shall furnish a bond for his faithful performance of said Contract, and for the connection therewith, and shall in all other respects perform the agreement created by the acceptance of said Bid, then the certified or cashier's check accompanying this bid in the amount of 10% shall be returned to bidder, otherwise the same shall become the property of the Westmoreland County Housing Authority; it being expressly understood and agreed that the liability for any and all claims hereunder shall be the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulated and agrees that the obligations of said Surety and its bonds shall be in no way impaired or affected by any extension of the time within which the Westmoreland County Housing Authority may accept such Bid; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these present to signed by their proper officers, the day and year first set forth above.

_____ (L.S.)

(PRINCIPAL)

BY: _____

RELEASE FOR ELECTRONIC FILES TRANSFER

PROJECT: TROUTMANS BUILDING EXTERIOR RENOVATIONS (ROOF AND MASONRY)

ADDRESS: 200 SOUTH MAIN STREET, GREENSBURG, PA 15601

OWNER: WESTMORELAND COUNTY HOUSING AUTHORITY

CJA PROJECT NO.:2335

Canzian/Johnston & Associates, LLC (CJA) and its consultants shall provide, upon written request, electronic files (DWF or PDF at CJA's convenience) to only the Prime Contractor, _____ for use related to work associated with the Troutmans Building Exterior Renovations (Roof and Masonry), _____, by signing below, does hereby accept and agree to the following terms and conditions and in addition agrees to comply as required by the General Conditions of the Contract and Section 01 3000:

Canzian/Johnston & Associates, LLC's and its consultant's electronic files are PC compatible. Canzian/Johnston & Associates, LLC makes no representation as to the compatibility of these files with the undersigned's hardware or software beyond the specified release of the referenced specifications. The information contained within all sealed and signed documents shall be deemed correct and superior to any transferred electronic files.

Data contained on these electronic files (DWF or PDF at CJA's convenience) is part of Canzian/Johnston & Associates, LLC's instruments of service and shall not be used by the undersigned or anyone else receiving this data through or from the undersigned for any purpose other than as backgrounds for record drawings for the referenced Project. Any other use or reuse by the undersigned or by others, will be at the undersigned's sole risk and without liability or legal exposure to Canzian/Johnston & Associates, LLC or its consultants. The undersigned agrees to make no claim and hereby waives to the fullest extent permitted by law, any claim or cause of action of any nature against Canzian/Johnston & Associates, LLC, its officers, directors, employees, agents or consultants, which may arise out of or in connection with the undersigned's use of the electronic files (DWF or PDF at CJA's convenience).

There is no representation on the part of Canzian/Johnston & Associates, LLC of the suitability of the electronic files, in whole or in part, for further use, of the durability of the information or the medium through which the information is furnished; Canzian/Johnston & Associates, LLC does not assume any responsibility or make any representation as to the accuracy or suitability of information contained therein for any use or reliance other than as backgrounds for record drawings for the referenced project.

Furthermore, the undersigned shall, to the fullest extent permitted by law, indemnify and hold harmless Canzian/Johnston & Associates, LLC and its consultants from all claims, damages, losses and expenses, including attorney's fees arising out of or resulting from the undersigned's use of these electronic files (DWF or PDF at CJA's convenience).

These electronic files (DWF or PDF at CJA's convenience) are not contract documents. Significant differences may exist between these electronic files and corresponding hard copy contract documents due to addenda, modification documents, value engineering, change orders or other revisions. Canzian/Johnston & Associates, LLC makes no representation regarding the accuracy or completeness of the electronic files (DWF or PDF at CJA's convenience) the undersigned receives. In the event that a conflict arises between the sealed and signed contract documents prepared by Canzian/Johnston & Associates, LLC and its consultants, and electronic files, the sealed and signed contract documents shall govern. The undersigned is responsible for determining if any conflict exists. The undersigned is fully and solely responsible to verify the accuracy of the electronic files and the actual built conditions, both existing conditions and new conditions generated as a result of the work, as it may affect the undersigned's work and assumes all risk for the use of the electronic files. By the undersigned's use of these electronic files, the undersigned is not relieved of the undersigned's duty to fully comply with the contract documents, including and without limitation, to check, confirm and coordinate all details and dimensions, field measurements, verify field conditions and coordinate the undersigned's work with other contractors' work for the project.

Because of the potential that the information presented in the electronic files (DWF or PDF at CJA's convenience) can be modified, unintentionally or otherwise, Canzian/Johnston & Associates, LLC and its consultants shall remove at their discretion all indications of ownership and/or involvement from each electronic display and associated drawing. The undersigned accepts that the electronic files are a component of the instruments of service of Canzian/Johnston & Associates, LLC who shall be deemed the author of the instruments of service and shall retain all common law, statutory and other reserved rights, including the copyright regardless of the presence of indications of ownership and/or involvement.

Canzian/Johnston & Associates, LLC and its consultants shall furnish the undersigned a copy of the available electronic files (DWF or PDF at CJA's convenience) of the civil, landscaping, architectural, structural, mechanical, electrical, and plumbing drawings. Under no circumstances shall delivery of the electronic files (DWF or PDF at CJA's convenience) for use by the undersigned be deemed a sale by Canzian/Johnston & Associates, LLC, and Canzian/Johnston & Associates, LLC makes no warranties, either express or implied, of merchantability and fitness for any particular purpose. In no event shall Canzian/Johnston & Associates, LLC be liable for any loss of profit or any consequential damages.

The electronic files (DWF or PDF at CJA's convenience) shall not be used in whole or part for any project or purpose, other than for the use for which they were prepared; the further use of the electronic files does not imply the review and approval of Canzian/Johnston & Associates, LLC of any further materials relying upon the electronic information.

The electronic files transferred shall be deemed current as of the date of the release of the sealed and signed documents of which they are a component.

The undersigned accepts where the electronic files transferred by Canzian/Johnston & Associates, LLC is incorporated in the development of further electronic information, "shop drawings" and the like, the further development of the electronic information shall be forwarded to Canzian/Johnston & Associates, LLC, in a format agreed upon by the undersigned and Canzian/Johnston & Associates, LLC, for incorporation in the final job record set, "as built," to be developed at the conclusion of the work.

NAME OF BIDDER _____

STREET ADDRESS _____

CITY, STATE _____ ZIP _____

AUTHORIZED SIGNATURE _____

DATE _____

CERTIFICATION OF BIDDER

PROJECT: TROUTMANS BUILDING EXTERIOR RENOVATIONS (ROOF AND MASONRY)

ADDRESS: 200 SOUTH MAIN STREET, GREENSBURG, PA 15601

OWNER: WESTMORELAND COUNTY HOUSING AUTHORITY

The undersigned hereby certifies that he/she and/or his/her authorized representative has thoroughly reviewed and evaluated the Contract Documents to determine whether he/she needs clarification of the Contract Documents or additional interpretation of the intent of the Contract Documents to determine the bid and that he/she has requested any needed clarification prior to submitting the bid; that he/she has visited the job site and that he/she fully understands the scope of work and the conditions affecting the work; that he/she has taken field measurements and fully understands the nature of the Project and the quantities of labor and materials that are required.

Additionally, he/she certifies that he/she understands the scope of the required work and that his price includes all of the labor and materials required to complete the Project as contemplated by the Construction Documents.

Additionally, he/she certifies that he/she has read and fully understands the requirements of specifications sections "GENERAL CONDITIONS", "SUPPLEMENTARY CONDITIONS", and "SCOPE OF WORK" as well as all other sections that have or may have an influence upon the work.

NAME OF BIDDER _____

STREET ADDRESS _____

CITY, STATE _____ ZIP _____

AUTHORIZED SIGNATURE _____

DATE _____

CERTIFICATE OF BIDDER REGARDING EQUAL EMPLOYMENT OPPORTUNITY INSTRUCTIONS

- A. This certification is required pursuant to Executive Order 11246 (30 F.R. 12319-25). The implementing rules and regulations provide that any bidder or prospective contractor, or any of their proposed subcontractors, shall state as an initial part of the bid or negotiation of the contract whether it has participated in any previous contract or subcontract subject to the equal opportunity clause; and, if so, whether it has filed all compliance reports due under applicable instruction.

When the certification indicated that the bidder has not filed a compliance report due under applicable instructions, such bidder shall be required to submit a compliance report within seven (7) calendar days after bid opening. No contract shall be awarded unless such report is submitted.

CERTIFICATION OF BIDDER

NAME AND ADDRESS OF BIDDER (Include Zip Code)

Bidder has participated in a previous contract or subcontract subject to the Equal Opportunity Clause.

NoYes

Compliance reports were required to be filed in connection with such contract or subcontract.

NoYes

Bidder has filed all compliance reports due under applicable instructions, including SF-100.

NoYes

Have you ever been or are you being considered for sanction due to violation of Executive Order 11246, as amended.

NoYes

NAME AND TITLE OF SIGNER (PLEASE TYPE)

SIGNATURE_____ **DATE**_____

STATEMENT OF BIDDERS QUALIFICATIONS

ALL QUESTIONS MUST BE ANSWERED. THE DATA GIVEN MUST BE CLEAR AND COMPREHENSIVE. THIS STATEMENT MUST BE NOTARIZED.

- A. Name of Bidder _____
- B. Business Address _____
- C. When Organized _____
- D. Where Incorporated _____
- E. How Many years have you been engaged in the contracting business under your present firm or trading name? _____
- F. Credit available for this contract \$ _____
- G. Contracts now on hand, gross amount \$ _____
- H. type of business entity: _____
- I. Number of Employees: _____
- J. Have you ever refused to sign a contract based on your original bid? _____
- K. Have you ever defaulted on a contract? _____
- L. Remarks: _____
- M. Will you, upon request, furnish any other information that the Local Authority may require, such as a financial statement: _____
- N. The undersigned hereby authorizes and requests any person to furnish any information requested by the Local Authority in verification of the recitals comprising this Statement of Bidder's Qualifications. (sign in blue or red ink)

BIDDER: By _____ Telephone No. _____

Title: _____ EIN No. _____

(owner, partner or officer)

Address: _____

Notary: State of: _____ ss County of: _____

Being duly sworn, deposes and says that he is _____

and that the answers to the foregoing questions and all statements therein are; true and correct.

Sworn to before me this _____ day of _____, 2025.

Public _____ My Commission Expires _____

PERFORMANCE BOND

BOND NO._____

KNOW ALL MEN BY THESE PRESENTS THAT _____, Contractor, hereinafter called Principal, and _____, a bonding company, a corporation duly organized under the laws of the State of _____, hereinafter called Surety, are held firmly and bound unto the Westmoreland County Housing Authority, as Obligee, hereinafter called Housing Authority for the use and benefit of claimants as herein below defined, in the amount of (insert a sum equal to the Contract Price) _____ Dollars (\$_____).

For the payment whereof Contractor and Surety bind themselves, their heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

WHEREAS, Principal has by written agreement dated _____, 2025, entered into a contract numbered _____, with the Housing Authority for the work titled Troutmans Building Exterior Renovations (Roof and Masonry), 200 South Main Street, Greensburg, PA 15601 in accordance with Drawings and prepared by Canzian/Johnston & Associates LLC, 361 Main Street, New Kensington, PA 15068, which contract is by reference made a part hereof referred to as Contract.

NOW, THEREFOR, THE CONDITIONS OF THE OIBLIGATION, is such that, if Principal shall promptly and faithfully perform said Contract then this obligation shall be null and void; otherwise, it shall remain in full force and effect. The Surety hereby waives notice of any alteration of extension of time made by the Housing Authority and its obligation is not affected by any such alterations and extension provided the same is within the scope of the Contract. Whenever the principal shall be, and is declared by the Housing Authority to be, in default under the Contract, the Housing Authority having performed Housing Authority's obligations thereunder, the Surety may promptly remedy the default or shall promptly:

1. Complete the Contract in accordance with its terms and conditions; or
2. Obtain a bid or bids for completing the Contract in accordance with its terms and conditions, and upon determination by the Housing Authority and the Surety jointly of the lowest responsive, responsible bidder, arrange for a contract between such bidder and the Housing Authority and make available as work progresses (even though there should be a default or succession of defaults under the contract or contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the balance of the contract price; but not exceeding, including other cost and damages for which the Surety may be liable hereunder, the amount set forth in the first paragraph hereof. The term "balance of the contract price", as used in this paragraph, shall mean the total amount payable by the Housing Authority to Contractor under the Contract and any amendments thereto, less the amount previously paid by the Housing Authority to Contractor. No right of action shall accrue on this bond to or for the use of any person or corporation other than the Housing Authority or successors of the Housing Authority.

Signed and sealed this _____ day of _____, 2025.

(Witness) By: _____
(Title)

(Bonding Company Name)

(Address)

(Witness) By: _____
(ATTORNEY-IN-FACT)

LABOR AND MATERIALMEN'S BOND

BOND NO. _____

KNOW ALL MEN BY THESE PRESENTS THAT

_____, Contractor, hereinafter called Principal, and _____, a bonding company, a corporation duly organized under the laws of the State of _____, hereinafter called Surety, are held firmly and bound unto the Westmoreland County Housing Authority, as Obligee, hereinafter called Housing Authority for the use and benefit of claimants as herein below defined, in the amount of (insert a sum equal to the Contract Price)

_____ Dollars (\$ _____).

For the payment whereof Contractor and Surety bind themselves, their heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

WHEREAS, Principal has by written agreement dated _____, 2025, entered into a contract numbered _____, with the Housing Authority for the work titled Troutmans Building Exterior Renovations (Roof and Masonry), 200 South Main Street, Greensburg, PA 15601 in accordance with Drawings and prepared by Canzian/Johnston & Associates LLC, 361 Main Street, New Kensington, PA 15068, which contract is by reference made a part hereof referred to as Contract.

NOW, THEREFOR, THE CONDITIONS OF THIS OIBLIGATION, is such that, if Principal shall promptly make payment to all claimants as hereinafter defined, for all labor and material used or reasonably required for use in the performance of the Contract, then this obligation shall be void; otherwise, it shall remain in full force and effect, subject however, to the following conditions:

1. A claimant is defined as one having a direct contract with the Principal or with a Subcontractor of the Principal for labor, material, or both, used or reasonably required for use in the performance of the Contract, labor and material being construed to include that part of water, gas, power, light, heat, oil, gasoline, telephone service, or rental of equipment directly applicable to the Contract.
2. The above-named Principal and Surety hereby jointly and severally agree with the housing Authority that every claimant as herein defined, who has not been paid in full before the expiration of a period of ninety (90) days after the date on which the last of such claimant's work or labor was done or performed, or materials were furnished by such claimant, may sue on this bond for the use of such claimant, prosecute the suit to final judgment for such sum or sums as may be justly due claimant, and have execution thereon. The housing Authority shall not be liable for the payment of any costs or expenses of any such suit.
3. No suit or action shall be commenced hereinunder by any claimant:
 - a. Unless claimant, other than one having a direct contract with the Principal, shall have given written notice to any two of the following: Principal, the Housing authority, or the Surety above named, within ninety (90) days after such claimant provided labor or furnished the last of the materials for which said claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were furnished, or to whom the work or labor was done or performed. Such notice shall be personally served or served by mailing the same by registered mail or certified mail, postage prepaid, in an envelope addressed to the Principal at any place the Principal maintains an office or conducts its business.
 - b. After the expiration of one (1) year following the date on which the last of the labor was performed or material was supplied by the party bringing suit.
 - c. Other than in a court of competent jurisdiction for the county or district in which the construction contract was to be performed.

4. The amount of this bond shall be reduced by and to the extent of any payment or payments made in good faith hereinunder, inclusive of the payment by Surety or mechanics' liens which may filed of record against said improvement, whether or not claim for the amount of such lien be presented under and against this bond.

Signed and sealed this _____ day of _____, 2025

(Company)

(Principal Name)

(CORPORATE SEAL)

(Address)

(Address)

By: _____

(Bonding Company Name)

(Address)

(Address)

(Witness)

By: _____
(ATTORNEY-IN-FACT)

MAINTENANCE BOND

KNOW ALL MEN BY THESE PRESENTS THAT WE, the undersigned
_____ as PRINCIPAL, and _____
a corporation organized and existing under the laws of the state of _____ as SURETY,
are held firmly unto Westmoreland County Housing Authority in the full and just sum of
_____ DOLLARS (\$ _____),
lawful money of the United States of America, to paid to the said
_____ to which payment well and truly be made and
done, we bind ourselves, our heirs, executors, administrators, and successors, jointly and
severly, firmly by these presents.

WHEREAS, the above bounded Principal, entered into a Contract with the said
_____ dated this the _____ day of _____
2025 for the Troutmans Building Exterior Renovations (Roof and Masonry), 200 South Main
Street, Greensburg, PA 15601 upon certain terms and conditions mentioned in the said
Contract, a copy of which is hereto attached and made apart of thereof; and

WHEREAS, IT IS ONE OF THE CONDITIONS of said Contract that these presents be
executed on or before the final acceptance of the Principal work to be performed under said
Contract.

NOW, THEREFORE, the condition of this obligation is such that if the above bounded Principal
shall remedy without cost to the said _____ any defect which
may develop during a period of one (1) year from the date of completion and acceptance of the
work performed under said Contract, provided such defects, in the judgment of
_____ or its successor having jurisdiction in the premises, are caused by
defective or inferior materials or workmanship, then this obligation shall be void, otherwise, it
shall be and remain in full force and effect.

IN WITNESS WHEREOF, the said Principal and Surety have duly executed this Bond under
Seal the day and year first above written.

CORPORATE SEAL

PRINCIPAL-CORPORATION

By: _____

SURETY COMPANY

By: _____

CONTRACTOR'S CERTIFICATE OF RELEASE

(INCLUDING CONSENT OF SURETY COMPANY TO FINAL PAYMENT)

FROM: CONTRACTOR

TO: OWNER

REFERENCE:

Contract For: Westmoreland County Housing Authority

Contract No.:

Contract Date:

Project Name: Troutmans Building Exterior Renovations (Roof and Masonry)

Project No: 2335

Project Address: 200 South Main Street, Greensburg, PA 15601

KNOW ALL MEN BY THESE PRESENTS:

The undersigned hereby certifies that there is due and payable under the above referenced Contract and duly approved Change Orders the undisputed final balance of (\$ _____) as indicated in the final Periodic Estimate for Partial Payment (for HUD-51001) submitted herewith.

The undersigned further certifies that there are no outstanding or unsettled claims that are due and owing by the Owner in additions to the amount set forth in Paragraph 1 hereof.

The undersigned further certifies that all work required under this Contract, including work required under Change Orders as itemized in the final Schedule of Change Orders (form HUD 51002) submitted herewith, has been performed in accordance with the terms thereof, that there are no claims of laborers or mechanics for unpaid wages arising out of the performance of this Contract; that there are no claims of any nature by any subcontractor, material supplier, or vendor, and that the wage rates paid by the Contractor and all Subcontractors were in conformity with the Contract provisions relating to said wage rates.

That in consideration of the payment of the amount stated in Paragraph 1 hereof, the undersigned does hereby release the Owner from any and all claims arising under or by virtue of this Contract.

IN WITNESS WHEREOF, the undersigned has signed and sealed this instrument this _____ day of _____, 2025.

Name of Contractor Signature and Title of Officer, the Affiant

_____ (Affiant), being first duly sworn on oath, deposes and says, that he is the _____ (Title) of _____ (Contractor), that he has read the forgoing Certificate and Release by him, and that the matters and things stated herein are to the best of his knowledge and belief, true.

Subscribed and sworn to before me this _____ day of _____, 2025.

My Commission expires _____ (Date) (Notary)

STATEMENT OF SURETY COMPANY

In accordance with the provisions of the Contract between Westmoreland County Housing Authority and

_____ (Contrator),
dated _____; _____ (Surety Company)
on the bond of _____ (Contractor Name and
Address)

after a careful examination of the books and records of said Contract with examination satisfied this company that all claims for labor and materials have been satisfactorily settled, and hereby approve of the final payment to the said _____ Contractor and these presents shall not relieve the Surety Company of any of its obligations to _____ as set forth in the said Surety Bond.

(Owner)

IN WITNESS WHEREOF; the said Surety Company has hereunto set its hand and seal this _____ ay of _____ 2025.

Surety Company

ATTEST:

(SEAL) _____ BY _____
SECRETARY PRESIDENT

NOTE: This statement, if executed by any person other than the President, or Vice President of the Company, must be accompanied by a Certificate of even date showing authority conferred upon the person so signing to execute such instruments on behalf of the company represented.

**MECHANIC'S LIEN AFFIDAVIT
STATE OF PENNSYLVANIA
COUNTY OF WESTMORELAND**

"TO ALL WHOM IT MAY CONCERN":

Whereas, we the undersigned, _____ (Contractor),
have entered into a construction contract dated _____ pursuant to which the
Westmoreland County Housing Authority, Greensburg, Westmoreland County, Pennsylvania,
agreed to pay a certain sum of money and _____ (Contractor)
agreed to render services as a contractor for construction of Project known as Troutmans
Building Exterior Renovations (Roof and Masonry),

NOW, THEREFORE, KNOW YE:

That we the undersigned for and in the consideration of 100% of the contract price as shown in
the Contract Documents and other good and valuable considerations, receipt of which is
hereby acknowledged, do hereby waive and release any and all lien or claim or right to lien on
the above described Project in full, arising under and by virtue of the general labor and
mechanic lien laws of Pennsylvania, on account of labor or materials or both furnished said
Westmoreland County Housing Authority.

It is also understood and agreed that Contractor shall, to the fullest extent permitted by law,
hold harmless, and defend the Owner, their agents and employees from and against any and
all claims, damages, lawsuits, losses and expenses, including but not limited to attorneys fees,
arising or resulting from the performance of the work, or the supplying or use of materials, by
any parties.

If the Owner, in good faith, notifies Contractor of any such claim, damage, lawsuit, loss,
expense or other such injury and demands indemnification or defense from the Contract and if
the Contractor refuses to assume its obligation, the Contractor agrees to pay the Owner
reasonable attorneys fees, court costs and other legal expenses incurred by Owner in enforcing
this paragraph.

Given under our hand and seal this _____ day of _____, 2025.

(Typed Authorized Name)

(Contractor)

By: _____

(Authorized Signature)

Title _____

END OF BONDS AND CERTIFICATES

**SECTION 00 7200
HUD 5370 GENERAL CONDITIONS**

FORM OF GENERAL CONDITIONS

1.01 THE GENERAL CONDITIONS APPLICABLE TO THIS CONTRACT IS ATTACHED FOLLOWING THIS PAGE.

RELATED REQUIREMENTS

2.01 SECTION 00 7300 - MODIFICATIONS TO GENERAL CONDITIONS.

END OF DOCUMENT

This page intentionally left blank

General Conditions for Construction Contracts - Public Housing Programs

U.S. Department of Housing and Urban
Development
Office of Public and Indian Housing
OMB Approval No. 2577-0157 (exp. 1/31/2027)

Applicability. This form is applicable to any
construction/development contract greater than \$250,000.

Public reporting burden for this collection of information is estimated to average 1.0 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Comments regarding the accuracy of this burden estimate and any suggestions for reducing this burden can be sent to the Reports Management Officer, Office of Policy Development and Research, REE, Department of Housing and Urban Development, 451 7th St SW, Room 4176, Washington, DC 20410-5000. When providing comments, please refer to OMB Approval No. 2577-0157. This form includes those clauses required by OMB's common rule on grantee procurement, implemented at HUD in 2 CFR 200, and those requirements set forth in Section 3 of the Housing and Urban Development Act of 1968 and its amendment by the Housing and Community Development Act of 1992, implemented by HUD at 24 CFR Part 75. The form is required for construction contracts awarded by Public Housing Agencies (PHAs). The form is used by Housing Authorities in solicitations to provide necessary contract clauses. If the form were not used, PHAs would be unable to enforce their contracts. Responses to the collection of information are required to obtain a benefit or to retain a benefit. The information requested does not lend itself to confidentiality. HUD may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB number.

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1. Definitions

- (a) "Architect" means the person or other entity engaged by the PHA to perform architectural, engineering, design, and other services related to the work as provided for in the contract. When a PHA uses an engineer to act in this capacity, the terms "architect" and "engineer" shall be synonymous. The Architect shall serve as a technical representative of the Contracting Officer. The Architect's authority is as set forth elsewhere in this contract.
- (b) "Contract" means the contract entered into between the PHA and the Contractor. It includes the forms of Bid, the Bid Bond, the Performance and Payment Bond or Bonds or other assurance of completion, the Certifications, Representations, and Other Statements of Bidders (form HUD-5370), these General Conditions of the Contract for Construction (form HUD-5370), the applicable wage rate determinations from the U.S. Department of Labor, any special conditions included elsewhere in the contract, the specifications, and drawings. It includes all formal changes to any of those documents by addendum, change order, or other modification.
- (c) "Contracting Officer" means the person delegated the authority by the PHA to enter into, administer, and/or terminate this contract and designated as such in writing to the Contractor. The term includes any successor Contracting Officer and any duly authorized representative of the Contracting Officer also designated in writing. The Contracting Officer shall be deemed the authorized agent of the PHA in all dealings with the Contractor.
- (d) "Contractor" means the person or other entity entering into the contract with the PHA to perform all of the work required under the contract.
- (e) "Drawings" means the drawings enumerated in the schedule of drawings contained in the Specifications and as described in the contract clause entitled Specifications and Drawings for Construction herein.
- (f) "HUD" means the United States of America acting through the Department of Housing and Urban Development including the Secretary, or any other person designated to act on its behalf. HUD has agreed, subject to the provisions of an Annual Contributions Terms and Conditions (ACC), to provide financial assistance to the PHA, which includes assistance in financing the work to be performed under this contract. As defined elsewhere in these General Conditions or the contract documents, the determination of HUD may be required to authorize changes in the work or for release of funds to the PHA for payment to the Contractor. Notwithstanding HUD's role, nothing in this contract shall be construed to create any contractual relationship between the Contractor and HUD.
- (g) "Project" means the entire project, whether construction or rehabilitation, the work for which is provided for in whole or in part under this contract.
- (h) "PHA" means the Public Housing Agency organized under applicable state laws which is a party to this contract.
- (j) "Specifications" means the written description of the technical requirements for construction and includes the criteria and tests for determining whether the requirements are met.
- (l) "Work" means materials, workmanship, and manufacture and fabrication of components.

2. Contractor's Responsibility for Work

- (a) The Contractor shall furnish all necessary labor, materials, tools, equipment, and transportation necessary for performance of the work. The Contractor shall also furnish all necessary water, heat, light, and power not made available to the Contractor by the PHA pursuant to the clause entitled Availability and Use of Utility Services herein.
- (b) The Contractor shall perform on the site, and with its own organization, work equivalent to at least [] (12 percent unless otherwise indicated) of the total amount of work to be performed under the order. This percentage may be reduced by a supplemental agreement to this order if, during performing the work, the Contractor requests a reduction and the Contracting Officer determines that the reduction would be to the advantage of the PHA.
- (c) At all times during performance of this contract and until the work is completed and accepted, the Contractor shall directly superintend the work or assign and have on the work site a competent superintendent who is satisfactory to the Contracting Officer and has authority to act for the Contractor.
- (d) The Contractor shall be responsible for all damages to persons or property that occur as a result of the Contractor's fault or negligence, and shall take proper safety and health precautions to protect the work, the workers, the public, and the property of others. The Contractor shall hold and save the PHA, its officers and agents, free and harmless from liability of any nature occasioned by the Contractor's performance. The Contractor shall also be responsible for all materials delivered and work performed until completion and acceptance of the entire work, except for any completed unit of work which may have been accepted under the contract.
- (e) The Contractor shall lay out the work from base lines and bench marks indicated on the drawings and be responsible for all lines, levels, and measurements of all work executed under the contract. The Contractor shall verify the figures before laying out the work and will be held responsible for any error resulting from its failure to do so.
- (f) The Contractor shall confine all operations (including storage of materials) on PHA premises to areas authorized or approved by the Contracting Officer.
- (g) The Contractor shall at all times keep the work area, including storage areas, free from accumulations of waste materials. After completing the work and before final inspection, the Contractor shall (1) remove from the premises all scaffolding, equipment, tools, and materials (including rejected materials) that are not the property of the PHA and all rubbish caused by its work; (2) leave the work area in a clean, neat, and orderly condition satisfactory to the Contracting Officer; (3) perform all specified tests; and, (4) deliver the installation in complete and operating condition.
- (h) The Contractor's responsibility will terminate when all work has been completed, the final inspection made, and the work accepted by the Contracting Officer. The Contractor will then be released from further obligation except as required by the warranties specified elsewhere in the contract.

3. Architect's Duties, Responsibilities, and Authority

- (a) The Architect for this contract, and any successor, shall be designated in writing by the Contracting Officer.

- (b) The Architect shall serve as the Contracting Officer's technical representative with respect to architectural, **Schedule** engineering, and design matters related to the work performed under the contract. The Architect may provide direction on contract performance. Such direction shall be within the scope of the contract and may not be of a nature which: (1) institutes additional work outside the scope of the contract; (2) constitutes a change as defined in the Changes clause herein; (3) causes an increase or decrease in the cost of the contract; (4) alters the Construction Progress Schedule; or (5) changes any of the other express terms or conditions of the contract.
- (c) The Architect's duties and responsibilities may include but shall not be limited to:
- (1) Making periodic visits to the work site, and on the basis of his/her on-site inspections, issuing written reports to the PHA which shall include all observed deficiencies. The Architect shall file a copy of the report with the Contractor's designated representative at the site;
 - (2) Making modifications in drawings and technical specifications and assisting the Contracting Officer in the preparation of change orders and other contract modifications for issuance by the Contracting Officer;
 - (3) Reviewing and making recommendations with respect to - (i) the Contractor's construction progress schedules; (ii) the Contractor's shop and detailed drawings; (iii) the machinery, mechanical and other equipment and materials or other articles proposed for use by the Contractor; and, (iv) the Contractor's price breakdown and progress payment estimates; and,
 - (4) Assisting in inspections, signing Certificates of Completion, and making recommendations with respect to acceptance of work completed under the contract.

4. Other Contracts

The PHA may undertake or award other contracts for additional work at or near the site of the work under this contract. The Contractor shall fully cooperate with the other contractors and with PHA employees and shall carefully adapt scheduling and performing the work under this contract to accommodate the additional work, heeding any direction that may be provided by the Contracting Officer. The Contractor shall not commit or permit any act that will interfere with the performance of work by any other contractor or by PHA employees

Construction Requirements

5. Pre-construction Conference and Notice to Proceed

of the work, and that it has investigated and satisfied itself

- (a) Within ten calendar days of contract execution, and prior to the commencement of work, the Contractor shall attend a preconstruction conference with representatives of the PHA, its Architect, and other interested parties convened by the PHA. The conference will serve to acquaint the participants with the general plan of the construction operation and all other requirements of the contract. The PHA will provide the Contractor with the date, time, and place of the conference.
- (b) The contractor shall begin work upon receipt of a written Notice to Proceed from the Contracting Officer or designee. The Contractor shall not begin work prior to receiving such notice.

6. Construction Progress

- (a) The Contractor shall, within five days after the work commences on the contract or another period of time determined by the Contracting Officer, prepare and submit to the Contracting Officer for approval three copies of a practicable schedule showing the order in which the Contractor proposes to perform the work, and the dates on which the Contractor contemplates starting and completing the several salient features of the work (including acquiring labor, materials, and equipment). The schedule shall be in the form of a progress chart of suitable scale to indicate appropriately the percentage of work scheduled for completion by any given date during the period. If the Contractor fails to submit a schedule within the time prescribed, the Contracting Officer may withhold approval of progress payments or take other remedies under the contract until the Contractor submits the required schedule.
- (b) The Contractor shall enter the actual progress on the chart as required by the Contracting Officer, and immediately deliver three copies of the annotated schedule to the Contracting Officer. If the Contracting Officer determines, upon the basis of inspection conducted pursuant to the clause entitled Inspection and Acceptance of Construction, herein that the Contractor is not meeting the approved schedule, the Contractor shall take steps necessary to improve its progress, including those that may be required by the Contracting Officer, without additional cost to the PHA. In this circumstance, the Contracting Officer may require the Contractor to increase the number of shifts, overtime operations, days of work, and/or the amount of construction plant, and to submit for approval any supplementary schedule or schedules in chart form as the Contracting Officer deems necessary to demonstrate how the approved rate of progress will be regained.
- (c) Failure of the Contractor to comply with the requirements of the Contracting Officer under this clause shall be grounds for a determination by the Contracting Officer that the Contractor is not prosecuting the work with sufficient diligence to ensure completion within the time specified in the Contract. Upon making this determination, the Contracting Officer may terminate the Contractor's right to proceed with the work, or any separable part of it, in accordance with the Default clause of this contract.

7. Site Investigation and Conditions Affecting the Work

- (a) The Contractor acknowledges that it has taken steps reasonably necessary to ascertain the nature and location as to the general and local conditions which can affect the work or its cost, including but not limited to, (1) conditions bearing upon transportation, disposal, handling, and storage of materials; (2) the availability of labor, water, electric power, and roads; (3) uncertainties of weather, river stages, tides, or similar physical conditions at the site; (4) the conformation and conditions of the ground; and (5) the character of equipment and facilities needed preliminary to and during work performance. The Contractor also acknowledges that it has satisfied itself as to the character, quality, and quantity of surface and subsurface materials or obstacles to be encountered insofar as this information is

reasonably ascertainable from an inspection of the site, including all exploratory work done by the PHA, as well as from the drawings and specifications made a part of this contract. Any failure of the Contractor to take the actions described and acknowledged in this paragraph will not relieve the Contractor from responsibility for estimating properly the difficulty and cost of successfully performing the work, or for proceeding to successfully perform the work without additional expense to the PHA.

- (b) The PHA assumes no responsibility for any conclusions or interpretations made by the Contractor based on the information made available by the PHA. Nor does the PHA assume responsibility for any understanding reached or representation made concerning conditions which can affect the work by any of its officers or agents before the execution of this contract, unless that understanding or representation is expressly stated in this contract.

8. Differing Site Conditions

(a) The Contractor shall promptly, and before the conditions are disturbed, give a written notice to the Contracting Officer of (1) subsurface or latent physical conditions at the site which differ materially from those indicated in this contract, or (2) unknown physical conditions at the site(s), of an unusual nature, which differ materially from those ordinarily encountered and generally recognized as inhering in work of the character provided for in the contract.

(b) The Contracting Officer shall investigate the site conditions promptly after receiving the notice. Work shall not proceed at the affected site, except at the

Contractor's risk, until the Contracting Officer has provided written instructions to the Contractor. If the conditions do materially so differ and cause an increase or decrease in the Contractor's cost of, or the time required for, performing any part of the work under this contract, whether or not changed as a result of the conditions, the Contractor shall file a claim in writing to the PHA within ten days after receipt of such instructions and, in any event, before proceeding with the work. An equitable adjustment in the contract price, the delivery schedule, or both shall be made under this clause and the contract modified in writing accordingly.

(c) No request by the Contractor for an equitable adjustment to the contract under this clause shall be allowed, unless the Contractor has given the written notice required; provided, that the time prescribed in (a) above for giving written notice may be extended by the Contracting Officer.

(d) No request by the Contractor for an equitable adjustment to the contract for differing site conditions shall be allowed if made after final payment under this contract.

9. Specifications and Drawings for Construction

(a) The Contractor shall keep on the work site a copy of the drawings and specifications and shall at all times give the Contracting Officer access thereto. Anything mentioned in the specifications and not shown on the drawings, or shown on the drawings and not mentioned in the specifications, shall be of like effect as if shown or mentioned in both. In case of difference between drawings and specifications, the specifications shall govern. In case of discrepancy in the figures, in the drawings, or in the specifications, the matter shall be

promptly submitted to the Contracting Officer, who shall

promptly make a determination in writing. Any adjustment by the Contractor without such a determination shall be at its own risk and expense. The Contracting Officer shall furnish from time to time such detailed drawings and other information as considered necessary, unless otherwise provided.

(b) Wherever in the specifications or upon the drawings the words "directed", "required", "ordered", "designated", "prescribed", or words of like import are used, it shall be understood that the "direction", "requirement", "order", "designation", or "prescription", of the Contracting Officer is intended and similarly the words "approved", "acceptable", "satisfactory", or words of like import shall mean "approved by", or "acceptable to", or "satisfactory to" the Contracting Officer, unless otherwise expressly stated.

(c) Where "as shown" "as indicated", "as detailed", or words of similar import are used, it shall be understood that the reference is made to the drawings accompanying this contract unless stated otherwise. The word "provided" as used herein shall be understood to mean "provide complete in place" that is "furnished and installed".

(d) "Shop drawings" means drawings, submitted to the PHA by the Contractor, subcontractor, or any lower tier subcontractor, showing in detail (1) the proposed fabrication and assembly of structural elements and (2) the installation (i.e., form, fit, and attachment details) of materials of equipment. It includes drawings, diagrams, layouts, schematics, descriptive literature, illustrations, schedules, performance and test data, and similar materials furnished by the Contractor to explain in detail specific portions of the work required by the contract. The PHA may duplicate, use, and disclose in any manner and for any purpose shop drawings delivered under this contract.

(e) If this contract requires shop drawings, the Contractor shall coordinate all such drawings, and review them for accuracy, completeness, and compliance with other contract requirements and shall indicate its approval thereon as evidence of such coordination and review. Shop drawings submitted to the Contracting Officer without evidence of the Contractor's approval may be returned for resubmission. The Contracting Officer will indicate an approval or disapproval of the shop drawings and if not approved as submitted shall indicate the PHA's reasons therefore. Any work done before such approval shall be at the Contractor's risk. Approval by the Contracting Officer shall not relieve the Contractor from responsibility for any errors or omissions in such drawings, nor from responsibility for complying with the requirements of this contract, except with respect to variations described and approved in accordance with (f) below.

(f) If shop drawings show variations from the contract requirements, the Contractor shall describe such variations in writing, separate from the drawings, at the time of submission. If the Architect approves any such variation and the Contracting Officer concurs, the Contracting Officer shall issue an appropriate modification to the contract, except that, if the variation is minor or does not involve a change in price or in time of performance, a modification need not be issued.

(g) It shall be the responsibility of the Contractor to make timely requests of the PHA for such large scale and full size drawings, color schemes, and other additional information, not already in his possession, which shall be

required in the planning and production of the work. Such requests may be submitted as the need arises, but each such request shall be filed in ample time to permit appropriate action to be taken by all parties involved so as to avoid delay.

- (h) The Contractor shall submit to the Contracting Officer for approval four copies (unless otherwise indicated) of all shop drawings as called for under the various headings of these specifications. Three sets (unless otherwise indicated) of all shop drawings, will be retained by the PHA and one set will be returned to the Contractor. As required by the Contracting Officer, the Contractor, upon completing the work under this contract, shall furnish a complete set of all shop drawings as finally approved. These drawings shall show all changes and revisions made up to the time the work is completed and accepted.
- (i) This clause shall be included in all subcontracts at any tier. It shall be the responsibility of the Contractor to ensure that all shop drawings prepared by subcontractors are submitted to the Contracting Officer.

10. As-Built Drawings

- (a) "As-built drawings," as used in this clause, means drawings submitted by the Contractor or subcontractor at any tier to show the construction of a particular structure or work as actually completed under the contract. "As-built drawings" shall be synonymous with "Record drawings."
- (b) As required by the Contracting Officer, the Contractor shall provide the Contracting Officer accurate information to be used in the preparation of permanent as-built drawings. For this purpose, the Contractor shall record on one set of contract drawings all changes from the installations originally indicated, and record final locations of underground lines by depth from finish grade and by accurate horizontal offset distances to permanent surface improvements such as buildings, curbs, or edges of walks.
- (c) This clause shall be included in all subcontracts at any tier. It shall be the responsibility of the Contractor to ensure that all as-built drawings prepared by subcontractors are submitted to the Contracting Officer.

11. Material and Workmanship

- (a) All equipment, material, and articles furnished under this contract shall be new and of the most suitable grade for the purpose intended, unless otherwise specifically provided in this contract. References in the contract to equipment, material, articles, or patented processes by trade name, make, or catalog number, shall be regarded as establishing a standard of quality and shall not be construed as limiting competition. The Contractor may, at its option, use any equipment, material, article, or process that, in the judgment of, and as approved by the Contracting Officer, is equal to that named in the specifications, unless otherwise specifically provided in this contract.
- (b) Approval of equipment and materials.
- (1) The Contractor shall obtain the Contracting Officer's approval of the machinery and mechanical and other equipment to be incorporated into the work. When requesting approval, the Contractor shall furnish to the Contracting Officer the name of the manufacturer, the model number, and other information concerning the performance, capacity, nature, and rating of the

machinery and mechanical and other equipment.

When required by this contract or by the Contracting Officer, the Contractor shall also obtain the

Contracting Officer's approval of the material or articles which the Contractor contemplates incorporating into the work. When requesting

approval, the Contractor shall provide full information concerning the material or articles. Machinery, equipment, material, and articles that do not have the required approval shall be installed or used at the risk of subsequent rejection.

- (2) When required by the specifications or the Contracting Officer, the Contractor shall submit appropriately marked samples (and certificates related to them) for approval at the Contractor's expense, with all shipping charges prepaid. The Contractor shall label, or otherwise properly mark on the container, the material or product represented, its place of origin, the name of the producer, the Contractor's name, and the identification of the construction project for which the material or product is intended to be used.
- (3) Certificates shall be submitted in triplicate, describing each sample submitted for approval and certifying that the material, equipment or accessory complies with contract requirements. The certificates shall include the name and brand of the product, name of manufacturer, and the location where produced.
- (4) Approval of a sample shall not constitute a waiver of the PHA right to demand full compliance with contract requirements. Materials, equipment and accessories may be rejected for cause even though samples have been approved.
- (5) Wherever materials are required to comply with recognized standards or specifications, such specifications shall be accepted as establishing the technical qualities and testing methods, but shall not govern the number of tests required to be made nor modify other contract requirements. The Contracting Officer may require laboratory test reports on items submitted for approval or may approve materials on the basis of data submitted in certificates with samples. Check tests will be made on materials delivered for use only as frequently as the Contracting Officer determines necessary to insure compliance of materials with the specifications. The Contractor will assume all costs of retesting materials which fail to meet contract requirements and/or testing materials offered in substitution for those found deficient.
- (6) After approval, samples will be kept in the Project office until completion of work. They may be built into the work after a substantial quantity of the materials they represent has been built in and accepted.
- (c) Requirements concerning lead-based paint. The Contractor shall comply with the requirements concerning lead-based paint contained in the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. 4821-4846) as implemented by 24 CFR Part 35.

12. Permits and Codes

- (a) The Contractor shall give all notices and comply with all applicable laws, ordinances, codes, rules and regulations. Notwithstanding the requirement of the Contractor to comply with the drawings and specifications in the contract, all work installed shall comply with all applicable codes and regulations as amended by any

waivers. Before installing the work, the Contractor shall examine the drawings and the specifications for compliance with applicable codes and regulations bearing on the work and shall immediately report any discrepancy it may discover to the Contracting Officer.

Where the requirements of the drawings and specifications fail to comply with the applicable code or regulation, the Contracting Officer shall modify the contract by change order pursuant to the clause entitled Changes herein to conform to the code or regulation.

- (b) The Contractor shall secure and pay for all permits, fees, and licenses necessary for the proper execution and completion of the work. Where the PHA can arrange for the issuance of all or part of these permits, fees and licenses, without cost to the Contractor, the contract amount shall be reduced accordingly.

13. Health, Safety, and Accident Prevention

(a) In performing this contract, the Contractor shall:

- (1) Ensure that no laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his/her health and/or safety as determined under construction safety and health standards promulgated by the Secretary of Labor by regulation;
- (2) Protect the lives, health, and safety of other persons;
- (3) Prevent damage to property, materials, supplies, and equipment; and,
- (4) Avoid work interruptions.

(b) For these purposes, the Contractor shall:

- (1) Comply with regulations and standards issued by the Secretary of Labor at 29 CFR Part 1926. Failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act (Public Law 91-54, 83 Stat. 96), 40 U.S.C. 3701 et seq.; and
 - (2) Include the terms of this clause in every subcontract so that such terms will be binding on each subcontractor.
- (c) The Contractor shall maintain an accurate record of exposure data on all accidents incident to work performed under this contract resulting in death, traumatic injury, occupational disease, or damage to property, materials, supplies, or equipment, and shall report this data in the manner prescribed by 29 CFR Part 1904.
- (d) The Contracting Officer shall notify the Contractor of any noncompliance with these requirements and of the corrective action required. This notice, when delivered to the Contractor or the Contractor's representative at the site of the work, shall be deemed sufficient notice of the noncompliance and corrective action required. After receiving the notice, the Contractor shall immediately take corrective action. If the Contractor fails or refuses to take corrective action promptly, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. The Contractor shall not base any claim or request for equitable adjustment for additional time or money on any stop order issued under these circumstances.
- (e) The Contractor shall be responsible for its subcontractors' compliance with the provisions of this clause. The Contractor shall take such action with respect to any subcontract as the PHA, the Secretary of Housing and Urban Development, or the Secretary of Labor shall direct as a means of enforcing such provisions.

14. Temporary Heating

The Contractor shall provide and pay for temporary heating, covering, and enclosures necessary to properly protect all work and materials against damage by dampness and cold, to dry out the work, and to facilitate the completion of the work. Any permanent heating equipment used shall be turned over to the PHA in the condition and at the time required by the specifications.

15. Availability and Use of Utility Services

- (a) The PHA shall make all reasonably required amounts of utilities available to the Contractor from existing outlets and supplies, as specified in the contract. Unless otherwise provided in the contract, the amount of each utility service consumed shall be charged to or paid for by the Contractor at prevailing rates charged to the PHA or, where the utility is produced by the PHA, at reasonable rates determined by the Contracting Officer. The Contractor shall carefully conserve any utilities furnished without charge.
- (b) The Contractor, at its expense and in a manner satisfactory to the Contracting Officer, shall install and maintain all necessary temporary connections and distribution lines, and all meters required to measure the amount of each utility used for the purpose of determining charges. Before final acceptance of the work by the PHA, the Contractor shall remove all the temporary connections, distribution lines, meters, and associated paraphernalia.

16. Protection of Existing Vegetation, Structures, Equipment, Utilities, and Improvements

- (a) The Contractor shall preserve and protect all structures, equipment, and vegetation (such as trees, shrubs, and grass) on or adjacent to the work site, which are not to be removed under this contract, and which do not unreasonably interfere with the work required under this contract.
- (b) The Contractor shall only remove trees when specifically authorized to do so, and shall avoid damaging vegetation that will remain in place. If any limbs or branches of trees are broken during performance of this contract, or by the careless operation of equipment, or by workmen, the Contractor shall trim those limbs or branches with a clean cut and paint the cut with a tree-pruning compound as directed by the Contracting Officer.
- (c) The Contractor shall protect from damage all existing improvements and utilities (1) at or near the work site and (2) on adjacent property of a third party, the locations of which are made known to or should be known by the Contractor. Prior to disturbing the ground at the construction site, the Contractor shall ensure that all underground utility lines are clearly marked.
- (d) The Contractor shall shore up, brace, underpin, secure, and protect as necessary all foundations and other parts of existing structures adjacent to, adjoining, and in the vicinity of the site, which may be affected by the excavations or other operations connected with the construction of the project.
- (e) Any equipment temporarily removed as a result of work under this contract shall be protected, cleaned, and replaced in the same condition as at the time of award of this contract.

- (f) New work which connects to existing work shall correspond in all respects with that to which it connects and/or be similar to existing work unless otherwise required by the specifications.
- (g) No structural members shall be altered or in any way weakened without the written authorization of the Contracting Officer, unless such work is clearly specified in the plans or specifications.
- (h) If the removal of the existing work exposes discolored or unfinished surfaces, or work out of alignment, such surfaces shall be refinished, or the material replaced as necessary to make the continuous work uniform and harmonious. This, however, shall not be construed to require the refinishing or reconstruction of dissimilar finishes previously exposed, or finished surfaces in good condition, but in different planes or on different levels **Construction** when brought together by the removal of intervening work, unless such refinishing or reconstruction is specified in the plans or specifications.
- (i) The Contractor shall give all required notices to any adjoining or adjacent property owner or other party before the commencement of any work.
- (j) The Contractor shall indemnify and save harmless the PHA from any damages on account of settlement or the loss of lateral support of adjoining property, any damages from changes in topography affecting drainage, and from all loss or expense and all damages for which the PHA may become liable in consequence of such injury or damage to adjoining and adjacent structures and their premises.
- (k) The Contractor shall repair any damage to vegetation, structures, equipment, utilities, or improvements, including those that are the property of a third party, resulting from failure to comply with the requirements of this contract or failure to exercise reasonable care in performing the work. If the Contractor fails or refuses to repair the damage promptly, the Contracting Officer may have the necessary work performed and charge the cost to the Contractor.

17. Temporary Buildings and Transportation of Materials

- (a) Temporary buildings (e.g., storage sheds, shops, offices, sanitary facilities) and utilities may be erected by the Contractor only with the approval of the Contracting Officer and shall be built with labor and materials furnished by the Contractor without expense to the PHA. The temporary buildings and utilities shall remain the property of the Contractor and shall be removed by the Contractor at its expense upon completion of the work. With the written consent of the Contracting Officer, the buildings and utilities may be abandoned and need not be removed.
- (b) The Contractor shall, as directed by the Contracting Officer, use only established roadways, or use temporary roadways constructed by the Contractor when and as authorized by the Contracting Officer. When materials are transported in prosecuting the work, vehicles shall not be loaded beyond the loading capacity recommended by the manufacturer of the vehicle or prescribed by any federal, state, or local law or regulation. When it is necessary to cross curbs or sidewalks, the Contractor shall protect them from damage. The Contractor shall repair or pay for the repair of any damaged curbs, sidewalks, or roads.

18. Clean Air and Water

The contractor shall comply with the Clean Air Act, as amended, 42 USC 7401 et seq., the Federal Water Pollution Control Water Act, as amended, 33 U.S.C. 1251 et seq., and standards issued pursuant thereto in the facilities in which this contract is to be performed.

19. Energy Efficiency

The Contractor shall comply with mandatory standards and policies relating to energy efficiency which are contained in the energy conservation plan issued in compliance with the Energy Policy and Conservation Act (Pub.L. 94-163) for the State in which the work under the contract is performed.

20. Inspection and Acceptance of

- (a) Definitions. As used in this clause -
 - (1) "Acceptance" means the act of an authorized representative of the PHA by which the PHA approves and assumes ownership of the work performed under this contract. Acceptance may be partial or complete.
 - (2) "Inspection" means examining and testing the work performed under the contract (including, when appropriate, raw materials, equipment, components, and intermediate assemblies) to determine whether it conforms to contract requirements.
 - (3) "Testing" means that element of inspection that determines the properties or elements, including functional operation of materials, equipment, or their components, by the application of established scientific principles and procedures.
- (b) The Contractor shall maintain an adequate inspection system and perform such inspections as will ensure that the work performed under the contract conforms to contract requirements. All work is subject to PHA inspection and test at all places and at all reasonable times before acceptance to ensure strict compliance with the terms of the contract.
- (c) PHA inspections and tests are for the sole benefit of the PHA and do not: (1) relieve the Contractor of responsibility for providing adequate quality control measures; (2) relieve the Contractor of responsibility for loss or damage of the material before acceptance; (3) constitute or imply acceptance; or, (4) affect the continuing rights of the PHA after acceptance of the completed work under paragraph (j) below.
- (d) The presence or absence of the PHA inspector does not relieve the Contractor from any contract requirement, nor is the inspector authorized to change any term or condition of the specifications without the Contracting Officer's written authorization. All instructions and approvals with respect to the work shall be given to the Contractor by the Contracting Officer.
- (e) The Contractor shall promptly furnish, without additional charge, all facilities, labor, and material reasonably needed for performing such safe and convenient inspections and tests as may be required by the Contracting Officer. The PHA may charge to the Contractor any additional cost of inspection or test when work is not ready at the time specified by the Contractor for inspection or test, or when prior rejection makes reinspection or retest necessary. The PHA shall perform all inspections and tests in a manner that will not unnecessarily delay the work. Special, full size, and performance tests shall be performed as described in the contract.

- (f) The PHA may conduct routine inspections of the construction site on a daily basis.
- (g) The Contractor shall, without charge, replace or correct work found by the PHA not to conform to contract requirements, unless the PHA decides that it is in its interest to accept the work with an appropriate adjustment in contract price. The Contractor shall promptly segregate and remove rejected material from the premises.
- (h) If the Contractor does not promptly replace or correct rejected work, the PHA may (1) by contract or otherwise, replace or correct the work and charge the cost to the Contractor, or (2) terminate for default the Contractor's right to proceed.
- (i) If any work requiring inspection is covered up without approval of the PHA, it must, if requested by the Contracting Officer, be uncovered at the expense of the Contractor. If at any time before final acceptance of the entire work, the **Construction PHA** considers it necessary or advisable, to examine work already completed by removing or tearing it out, the Contractor, shall on request, promptly furnish all necessary facilities, labor, and material. If such work is found to be defective or nonconforming in any material respect due to the fault of the Contractor or its subcontractors, the Contractor shall defray all the expenses of the examination and of satisfactory reconstruction. If, however, such work is found to meet the requirements of the contract, the Contracting Officer shall make an equitable adjustment to cover the cost of the examination and reconstruction, including, if completion of the work was thereby delayed, an extension of time.
- (j) The Contractor shall notify the Contracting Officer, in writing, as to the date when in its opinion all or a designated portion of the work will be substantially completed and ready for inspection. If the Architect determines that the state of preparedness is as represented, the PHA will promptly arrange for the inspection. Unless otherwise specified in the contract, the PHA shall accept, as soon as practicable after completion and inspection, all work required by the contract or that portion of the work the Contracting Officer determines and designates can be accepted separately. Acceptance shall be final and conclusive except for latent defects, fraud, gross mistakes amounting to fraud, or the PHA's right under any warranty or guarantee.

21. Use and Possession Prior to Completion

- (a) The PHA shall have the right to take possession of or use any completed or partially completed part of the work. Before taking possession of or using any work, the Contracting Officer shall furnish the Contractor a list of items of work remaining to be performed or corrected on those portions of the work that the PHA intends to take possession of or use. However, failure of the Contracting Officer to list any item of work shall not relieve the Contractor of responsibility for complying with the terms of the contract. The PHA's possession or use shall not be deemed an acceptance of any work under the contract.
- (b) While the PHA has such possession or use, the Contractor shall be relieved of the responsibility for (1) the loss of or damage to the work resulting from the PHA's possession or use, notwithstanding the terms of the clause entitled Permits and Codes herein; (2) all maintenance costs on the areas occupied; and, (3) furnishing heat, light, power, and water used in the areas

occupied without proper remuneration therefore. If prior possession or use by the PHA delays the progress of the work or causes additional expense to the Contractor, an equitable adjustment shall be made in the contract price or the time of completion, and the contract shall be modified in writing accordingly.

22. Warranty of Title

The Contractor warrants good title to all materials, supplies, and equipment incorporated in the work and agrees to deliver the premises together with all improvements thereon free from any claims, liens or charges, and agrees further that neither it nor any other person, firm or corporation shall have any right to a lien upon the premises or anything appurtenant thereto.

23. Warranty of

- (a) In addition to any other warranties in this contract, the Contractor warrants, except as provided in paragraph (j) of this clause, that work performed under this contract conforms to the contract requirements and is free of any defect in equipment, material, or workmanship performed by the Contractor or any subcontractor or supplier at any tier. This warranty shall continue for a period of _____ (one year unless otherwise indicated) from the date of final acceptance of the work. If the PHA takes possession of any part of the work before final acceptance, this warranty shall continue for a period of (one year unless otherwise indicated) from the date that the PHA takes possession.
- (b) The Contractor shall remedy, at the Contractor's expense, any failure to conform, or any defect. In addition, the Contractor shall remedy, at the Contractor's expense, any damage to PHA-owned or controlled real or personal property when the damage is the result of—
- (1) The Contractor's failure to conform to contract requirements; or
 - (2) Any defects of equipment, material, workmanship or design furnished by the Contractor.
- (c) The Contractor shall restore any work damaged in fulfilling the terms and conditions of this clause. The Contractor's warranty with respect to work repaired or replaced will run for (one year unless otherwise indicated) from the date of repair or replacement.
- (d) The Contracting Officer shall notify the Contractor, in writing, within a reasonable time after the discovery of any failure, defect or damage.
- (e) If the Contractor fails to remedy any failure, defect, or damage within a reasonable time after receipt of notice, the PHA shall have the right to replace, repair or otherwise remedy the failure, defect, or damage at the Contractor's expense.
- (f) With respect to all warranties, express or implied, from subcontractors, manufacturers, or suppliers for work performed and materials furnished under this contract, the Contractor shall:
- (1) Obtain all warranties that would be given in normal commercial practice;
 - (2) Require all warranties to be executed in writing, for the benefit of the PHA; and,
 - (3) Enforce all warranties for the benefit of the PHA.
- (g) In the event the Contractor's warranty under paragraph (a) of this clause has expired, the PHA may bring suit at its own expense to enforce a subcontractor's, manufacturer's or supplier's warranty.

- (h) Unless a defect is caused by the negligence of the Contractor or subcontractor or supplier at any tier, the Contractor shall not be liable for the repair of any defect of material or design furnished by the PHA nor for the repair of any damage that results from any defect in PHA furnished material or design.
- (i) Notwithstanding any provisions herein to the contrary, the establishment of the time periods in paragraphs (a) and (c) above relate only to the specific obligation of the Contractor to correct the work, and have no relationship to the time within which its obligation to comply with the contract may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Contractor's liability with respect to its obligation other than specifically to correct the work.
- (j) This warranty shall not limit the PHA's rights under the Inspection and Acceptance of Construction clause of this contract with respect to latent defects, gross mistakes or fraud.

24. Prohibition Against Liens

The Contractor is prohibited from placing a lien on the PHA's property. This prohibition shall apply to all subcontractors at any tier and all materials suppliers.

Administrative Requirements

25. Contract Period

this contract within _____ calendar days of the effective date of the contract, or within the time schedule established in the notice to proceed issued by the Contracting Officer.

26. Order of Provisions

accordance with the terms and conditions of the

In the event of a conflict between these General Conditions and the Specifications, the General Conditions shall prevail. In the event of a conflict between the contract and any applicable state or local law or regulation, the state or local law or regulation shall prevail; provided that such state or local law or regulation does not conflict with, or is less restrictive than applicable federal law, regulation, or Executive Order. In the event of such a conflict, applicable federal law, regulation, and Executive Order shall prevail.

27. Payments

retain ten (10) percent of the amount of progress

- (a) The PHA shall pay the Contractor the price as provided in this contract.
- (b) The PHA shall make progress payments approximately every 30 days as the work proceeds, on estimates of work accomplished which meets the standards of quality established under the contract, as approved by the Contracting Officer. The PHA may, subject to written determination and approval of the Contracting Officer, make more frequent payments to contractors which are qualified small businesses.
- (c) Before the first progress payment under this contract, the Contractor shall furnish, in such detail as requested by the Contracting Officer, a breakdown of the total contract price showing the amount included therein for each principal category of the work, which shall substantiate the payment amount requested in order to provide a

basis for determining progress payments. The breakdown shall be approved by the Contracting Officer and must be acceptable to HUD. If the contract covers more than one project, the Contractor shall furnish a separate breakdown for each. The values and quantities employed in making up this breakdown are for determining the amount of progress payments and shall not be construed as a basis for additions to or deductions from the contract price. The Contractor shall prorate its overhead and profit over the construction period of the contract.

- (d) The Contractor shall submit, on forms provided by the PHA, periodic estimates showing the value of the work performed during each period based upon the approved

submitted not later than _____ days in advance of the date set for payment and are subject to correction and revision as required. The estimates must be approved by the Contracting Officer with the concurrence of the Architect prior to payment. If the contract covers more than one project, the Contractor shall furnish a separate progress payment estimate for each.

- (e) Along with each request for progress payments and the required estimates, the Contractor shall furnish the following certification, or payment shall not be made: I hereby certify, to the best of my knowledge and belief, that:

- (1) The amounts requested are only for performance in accordance with the specifications, terms, and conditions of the contract;
- (2) Payments to subcontractors and suppliers have been made from previous payments received under the contract, and timely payments will be made from the proceeds of the payment covered by this certification, in accordance with subcontract agreements; and,
- (3) This request for progress payments does not include any amounts which the prime contractor intends to withhold or retain from a subcontractor or supplier in subcontract.

Name:

Title:

Date:

- (f) Except as otherwise provided in State law, the PHA shall

payments until completion and acceptance of all work under the contract; except, that if upon completion of 50 percent of the work, the Contracting Officer, after consulting with the Architect, determines that the Contractor's performance and progress are satisfactory, the PHA may make the remaining payments in full for the work subsequently completed. If the Contracting Officer subsequently determines that the Contractor's performance and progress are unsatisfactory, the PHA shall reinstate the ten (10) percent (or other percentage as provided in State law) retainage until such time as the Contracting Officer determines that performance and progress are satisfactory.

- (g) The Contracting Officer may authorize material delivered on the site and preparatory work done to be taken into consideration when computing progress payments.

Material delivered to the Contractor at locations other than the site may also be taken into consideration if the Contractor furnishes satisfactory evidence that (1) it has acquired title to such material; (2) the material is properly stored in a bonded warehouse, storage yard, or similar suitable place as may be approved by the Contracting Officer; (3) the material is insured to cover its full value; and (4) the material will be used to perform this contract. Before any progress payment which includes delivered material is made, the Contractor shall furnish such documentation as the Contracting Officer may require to assure the protection of the PHA's interest in such materials. The Contractor shall remain responsible for such stored material notwithstanding the transfer of title to the PHA.

- (h) All material and work covered by progress payments made shall, at the time of payment become the sole property of the PHA, but this shall not be construed as (1) relieving the Contractor from the sole responsibility for all material and work upon which payments have been made or the restoration of any damaged work; or, (2) waiving the right of the PHA to require the fulfillment of all of the terms of the contract. In the event the work of the Contractor has been damaged by other contractors or persons other than employees of the PHA in the course of their employment, the Contractor shall restore such damaged work without cost to the PHA and to seek redress for its damage only from those who directly caused it.
- (i) The PHA shall make the final payment due the Contractor under this contract after (1) completion and final acceptance of all work; and (2) presentation of release of all claims against the PHA arising by virtue of this contract, other than claims, in stated amounts, that the Contractor has specifically excepted from the operation of the release. Each such exception shall embrace no more than one claim, the basis and scope of which shall be clearly defined. The amounts for such excepted claims shall not be included in the request for final payment. A release may also be required of the assignee if the Contractor's claim to amounts payable under this contract has been assigned.
- (j) Prior to making any payment, the Contracting Officer may require the Contractor to furnish receipts or other evidence of payment from all persons performing work and supplying material to the Contractor, if the Contracting Officer determines such evidence is necessary to substantiate claimed costs.
- (k) The PHA shall not; (1) determine or adjust any claims for payment or disputes arising there under between the Contractor and its subcontractors or material suppliers; or, (2) withhold any moneys for the protection of the subcontractors or material suppliers. The failure or refusal of the PHA to withhold moneys from the Contractor shall in nowise impair the obligations of any surety or sureties under any bonds furnished under this contract.

28. Contract Modifications

- (a) Only the Contracting Officer has authority to modify any term or condition of this contract. Any contract modification shall be authorized in writing.
- (b) The Contracting Officer may modify the contract unilaterally (1) pursuant to a specific authorization stated in a contract clause (e.g., Changes); or (2) for administrative matters which do not change the rights or

responsibilities of the parties (e.g., change in the PHA address). All other contract modifications shall be in the form of supplemental agreements signed by the Contractor and the Contracting Officer.

- (c) When a proposed modification requires the approval of HUD prior to its issuance (e.g., a change order that exceeds the PHA's approved threshold), such modification shall not be effective until the required approval is received by the PHA.

29. Changes

- (a) The Contracting Officer may, at any time, without notice to the sureties, by written order designated or indicated to be a change order, make changes in the work within the general scope of the contract including changes:
 - (1) In the specifications (including drawings and designs);
 - (2) In the method or manner of performance of the work;
 - (3) PHA-furnished facilities, equipment, materials, services, or site; or,
 - (4) Directing the acceleration in the performance of the work.
- (b) Any other written order or oral order (which, as used in this paragraph (b), includes direction, instruction, interpretation, or determination) from the Contracting Officer that causes a change shall be treated as a change order under this clause; provided, that the Contractor gives the Contracting Officer written notice stating (1) the date, circumstances and source of the order and (2) that the Contractor regards the order as a change order.
- (c) Except as provided in this clause, no order, statement or conduct of the Contracting Officer shall be treated as a change under this clause or entitle the Contractor to an equitable adjustment.
- (d) If any change under this clause causes an increase or decrease in the Contractor's cost of, or the time required for the performance of any part of the work under this contract, whether or not changed by any such order, the Contracting Officer shall make an equitable adjustment and modify the contract in writing. However, except for a adjustment based on defective specifications, no proposal for any change under paragraph (b) above shall be allowed for any costs incurred more than 20 days (5 days for oral orders) before the Contractor gives written notice as required. In the case of defective specifications for which the PHA is responsible, the equitable adjustment shall include any increased cost reasonably incurred by the Contractor in attempting to comply with the defective specifications.
- (e) The Contractor must assert its right to an adjustment under this clause within 30 days after (1) receipt of a written change order under paragraph (a) of this clause, or (2) the furnishing of a written notice under paragraph (b) of this clause, by submitting a written statement describing the general nature and the amount of the proposal. If the facts justify it, the Contracting Officer may extend the period for submission. The proposal may be included in the notice required under paragraph (b) above. No proposal by the Contractor for an equitable adjustment shall be allowed if asserted after final payment under this contract.
- (f) The Contractor's written proposal for equitable adjustment shall be submitted in the form of a lump sum proposal supported with an itemized breakdown of all increases and decreases in the contract in at least the following details:

- (1) Direct Costs. Materials (list individual items, the quantity and unit cost of each, and the aggregate cost); Transportation and delivery costs associated with materials; Labor breakdowns by hours or unit costs (identified with specific work to be performed); Construction equipment exclusively necessary for the change; Costs of preparation and/ or revision to shop drawings resulting from the change; Worker's Compensation and Public Liability Insurance; Employment taxes under FICA and FUTA; and, Bond Costs when size of change warrants revision.
- (2) Indirect Costs. Indirect costs may include overhead, general and administrative expenses, and fringe benefits not normally treated as direct costs.
- (3) Profit. The amount of profit shall be negotiated and may vary according to the nature, extent, and complexity of the work required by the change. The allowability of the direct and indirect costs shall be determined in accordance with the Contract Cost Principles and Procedures for Commercial Firms in Part 31 of the Federal Acquisition Regulation (48 CFR 1-31), as implemented by HUD Handbook 2210.18, in effect on the date of this contract. The Contractor shall not be allowed a profit on the profit received by any subcontractor. Equitable adjustments for deleted work shall include a credit for profit and may include a credit for indirect costs. On proposals covering both increases and decreases in the amount of the contract, the application of indirect costs and profit shall be on the net-change in direct costs for the Contractor or subcontractor performing the work.
- (g) The Contractor shall include in the proposal its request for time extension (if any), and shall include sufficient information and dates to demonstrate whether and to what extent the change will delay the completion of the contract in its entirety.
- (h) The Contracting Officer shall act on proposals within 30 days after their receipt, or notify the Contractor of the date when such action will be taken.
- (i) Failure to reach an agreement on any proposal shall be a dispute under the clause entitled Disputes herein. Nothing in this clause, however, shall excuse the Contractor from proceeding with the contract as changed.
- (j) Except in an emergency endangering life or property, no change shall be made by the Contractor without a prior order from the Contracting Officer.

30. Suspension of Work

- (a) The Contracting Officer may order the Contractor in writing to suspend, delay, or interrupt all or any part of the work of this contract for the period of time that the Contracting Officer determines appropriate for the convenience of the PHA.
- (b) If the performance of all or any part of the work is, for an unreasonable period of time, suspended, delayed, or interrupted (1) by an act of the Contracting Officer in the administration of this contract, or (2) by the Contracting Officer's failure to act within the time specified (or within a reasonable time if not specified) in this contract an adjustment shall be made for any increase in the cost of performance of the contract (excluding profit) necessarily caused by such unreasonable suspension, delay, or interruption and the contract modified in writing accordingly. However, no adjustment shall be made under this clause for any suspension, delay, or interruption to the extent that performance would have

been so suspended, delayed, or interrupted by any other cause, including the fault or negligence of the Contractor or for which any equitable adjustment is provided for or excluded under any other provision of this contract.

- (c) A claim under this clause shall not be allowed (1) for any costs incurred more than 20 days before the Contractor shall have notified the Contracting Officer in writing of the act or failure to act involved (but this requirement shall not apply as to a claim resulting from a suspension order); and, (2) unless the claim, in an amount stated, is asserted in writing as soon as practicable after the termination of the suspension, delay, or interruption, but not later than the date of final payment under the contract.

31. Disputes

- (a) "Claim," as used in this clause, means a written demand or written assertion by one of the contracting parties seeking, as a matter of right, the payment of money in a sum certain, the adjustment or interpretation of contract terms, or other relief arising under or relating to the contract. A claim arising under the contract, unlike a claim relating to the contract, is a claim that can be resolved under a contract clause that provides for the relief sought by the claimant. A voucher, invoice, or other routine request for payment that is not in dispute when submitted is not a claim. The submission may be converted to a claim by complying with the requirements of this clause, if it is disputed either as to liability or amount or is not acted upon in a reasonable time.
- (b) Except for disputes arising under the clauses entitled Labor Standards - Davis Bacon and Related Acts, herein, all disputes arising under or relating to this contract, including any claims for damages for the alleged breach thereof which are not disposed of by agreement, shall be resolved under this clause.
- (c) All claims by the Contractor shall be made in writing and submitted to the Contracting Officer for a written decision. A claim by the PHA against the Contractor shall be subject to a written decision by the Contracting Officer.
- (d) The Contracting Officer shall, within 60 (unless otherwise indicated) days after receipt of the request, decide the claim or notify the Contractor of the date by which the decision will be made.
- (e) The Contracting Officer's decision shall be final unless the Contractor (1) appeals in writing to a higher level in the PHA in accordance with the PHA's policy and procedures, (2) refers the appeal to an independent mediator or arbitrator, or (3) files suit in a court of competent jurisdiction. Such appeal must be made within (30 unless otherwise indicated) days after receipt of the Contracting Officer's decision.
- (f) The Contractor shall proceed diligently with performance of this contract, pending final resolution of any request for relief, claim, appeal, or action arising under or relating to the contract, and comply with any decision of the Contracting Officer.

32. Default

- (a) If the Contractor refuses or fails to prosecute the work, or any separable part thereof, with the diligence that will insure its completion within the time specified in this contract, or any extension thereof, or fails to complete said work within this time, the Contracting Officer may, by written notice to the Contractor, terminate the right to

proceed with the work (or separable part of the work) that has been delayed. In this event, the PHA may take over the work and complete it, by contract or otherwise, and may take possession of and use any materials, equipment, and plant on the work site necessary for completing the work. The Contractor and its sureties shall be liable for any damage to the PHA resulting from the **Convenience** Contractor's refusal or failure to complete the work within

the specified time, whether or not the Contractor's right to proceed with the work is terminated. This liability includes any increased costs incurred by the PHA in completing the work.

- (b) The Contractor's right to proceed shall not be terminated or the Contractor charged with damages under this clause if—
- (1) The delay in completing the work arises from unforeseeable causes beyond the control and without the fault or negligence of the Contractor. Examples of such causes include (i) acts of God, or of the public enemy, (ii) acts of the PHA or other governmental entity in either its sovereign or contractual capacity, (iii) acts of another contractor in the performance of a contract with the PHA, (iv) fires, (v) floods, (vi) epidemics, (vii) quarantine restrictions, (viii) strikes, (ix) freight embargoes, (x) unusually severe weather, or (xi) delays of subcontractors or suppliers at any tier arising from unforeseeable causes beyond the control and without the fault or negligence of both the Contractor and the subcontractors or suppliers; and
- (2) The Contractor, within days (10 days unless otherwise indicated) from the beginning of such delay (unless extended by the Contracting Officer) notifies the Contracting Officer in writing of the causes of delay. The Contracting Officer shall ascertain the facts and the extent of the delay. If, in the judgment of the Contracting Officer, the findings of fact warrant such action, time for completing the work shall be extended by written modification to the contract. The findings of the Contracting Officer shall be reduced to a written decision which shall be subject to the provisions of the Disputes clause of this contract.
- (c) If, after termination of the Contractor's right to proceed, it is determined that the Contractor was not in default, or that the delay was excusable, the rights and obligations of the parties will be the same as if the termination had been for convenience of the PHA.

33. Liquidated Damages

- (a) If the Contractor fails to complete the work within the time specified in the contract, or any extension, as specified in the clause entitled Default of this contract, the Contractor shall pay to the PHA as liquidated damages, the sum of \$ _____ [Contracting Officer insert amount] for each day of delay. If different completion dates are specified in the contract for separate parts or stages of the work, the amount of liquidated damages shall be assessed on those parts or stages which are delayed. To the extent that the Contractor's delay or nonperformance is excused under another clause in this contract, liquidated damages shall not be due the PHA. The Contractor remains liable for damages caused other than by delay.
- (b) If the PHA terminates the Contractor's right to proceed, the resulting damage will consist of liquidated damages until such reasonable time as may be required for final

completion of the work together with any increased costs occasioned the PHA in completing the work.

- (c) If the PHA does not terminate the Contractor's right to proceed, the resulting damage will consist of liquidated damages until the work is completed or accepted.

34. Termination for

- (a) The Contracting Officer may terminate this contract in whole, or in part, whenever the Contracting Officer determines that such termination is in the best interest of the PHA. Any such termination shall be effected by delivery to the Contractor of a Notice of Termination specifying the extent to which the performance of the work under the contract is terminated, and the date upon which such termination becomes effective.
- (b) If the performance of the work is terminated, either in whole or in part, the PHA shall be liable to the Contractor for reasonable and proper costs resulting from such termination upon the receipt by the PHA of a properly presented claim setting out in detail: (1) the total cost of the work performed to date of termination less the total amount of contract payments made to the Contractor; (2) the cost (including reasonable profit) of settling and paying claims under subcontracts and material orders for work performed and materials and supplies delivered to the site, payment for which has not been made by the PHA to the Contractor or by the Contractor to the subcontractor or supplier; (3) the cost of preserving and protecting the work already performed until the PHA or assignee takes possession thereof or assumes responsibility therefore; (4) the actual or estimated cost of legal and accounting services reasonably necessary to prepare and present the termination claim to the PHA; and (5) an amount constituting a reasonable profit on the value of the work performed by the Contractor.
- (c) The Contracting Officer will act on the Contractor's claim within days (60 days unless otherwise indicated) of receipt of the Contractor's claim.
- (d) Any disputes with regard to this clause are expressly made subject to the provisions of the Disputes clause of this contract.

35. Assignment of Contract

The Contractor shall not assign or transfer any interest in this contract; except that claims for monies due or to become due from the PHA under the contract may be assigned to a bank, trust company, or other financial institution. Such assignments of claims shall only be made with the written concurrence of the Contracting Officer. If the Contractor is a partnership, this contract shall inure to the benefit of the surviving or remaining member(s) of such partnership as approved by the Contracting Officer.

36. Insurance

- (a) Before commencing work, the Contractor and each subcontractor shall furnish the PHA with certificates of insurance showing the following insurance is in force and will insure all operations under the Contract:
- (1) Workers' Compensation, in accordance with state or Territorial Workers' Compensation laws.
- (2) Commercial General Liability with a combined single limit for bodily injury and property damage of not less than \$ _____ [Contracting Officer insert amount]

per occurrence to protect the Contractor and each subcontractor against claims for bodily injury or death and damage to the property of others. This shall cover the use of all equipment, hoists, and vehicles on the site(s) not covered by Automobile Liability under (3) below. If the Contractor has a "claims made" policy, then the following additional requirements apply: the policy must provide a "retroactive date" which must be on or before the execution date of the Contract; and the extended reporting period may not be less than five years following the completion date of the Contract.

- (3) Automobile Liability on owned and non-owned motor vehicles used on the site(s) or in connection therewith for a combined single limit for bodily injury and property damage of not less than \$ _____

[Contracting Officer insert amount] per occurrence.

- (b) Before commencing work, the Contractor shall furnish the PHA with a certificate of insurance evidencing that Builder's Risk (fire and extended coverage) Insurance on all work in place and/or materials stored at the building site(s), including foundations and building equipment, is in force. The Builder's Risk Insurance shall be for the benefit of the Contractor and the PHA as their interests may appear and each shall be named in the policy or policies as an insured. The Contractor in installing equipment supplied by the PHA shall carry insurance on such equipment from the time the Contractor takes possession thereof until the Contract work is accepted by the PHA. The Builder's Risk Insurance need not be carried on excavations, piers, footings, or foundations until such time as work on the superstructure is started. It

need not be carried on landscape work. Policies shall furnish coverage at all times for the full cash value of all completed construction, as well as materials in place and/or stored at the site(s), whether or not partial payment has been made by the PHA. The Contractor may terminate this insurance on buildings as of the date taken over for occupancy by the PHA. The Contractor is not required to carry Builder's Risk Insurance for modernization work which does not involve structural alterations or additions and where the PHA's existing fire and extended coverage policy can be endorsed to include such work.

- (c) All insurance shall be carried with companies which are financially responsible and admitted to do business in the State in which the project is located. If any such insurance is due to expire during the construction period, the Contractor (including subcontractors, as applicable) shall not permit the coverage to lapse and shall furnish evidence of coverage to the Contracting Officer. All certificates of insurance, as evidence of coverage, shall provide that no coverage may be canceled or non-renewed by the insurance company until at least 30 days prior written notice has been given to the Contracting Officer.

37. Subcontracts

- (a) Definitions. As used in this contract -

(1) "Subcontract" means any contract, purchase order, or other purchase agreement, including modifications and change orders to the foregoing, entered into by a subcontractor to furnish supplies, materials, equipment, and services for the performance of the prime contract or a subcontract.

(2) "Subcontractor" means any supplier, vendor, or firm that furnishes supplies, materials, equipment, or services to or for the Contractor or another subcontractor.

- (b) The Contractor shall not enter into any subcontract with any subcontractor who has been temporarily denied participation in a HUD program or who has been suspended or debarred from participating in contracting programs by any agency of the United States Government or of the state in which the work under this contract is to be performed.
- (c) The Contractor shall be as fully responsible for the acts or omissions of its subcontractors, and of persons either directly or indirectly employed by them as for the acts or omissions of persons directly employed by the Contractor.
- (d) The Contractor shall insert appropriate clauses in all subcontracts to bind subcontractors to the terms and conditions of this contract insofar as they are applicable to the work of subcontractors.
- (e) Nothing contained in this contract shall create any contractual relationship between any subcontractor and the PHA or between the subcontractor and HUD.

38. Subcontracting with Small and Minority Firms, Women's Business Enterprise, and Labor Surplus Area Firms

The Contractor shall take the following steps to ensure that, whenever possible, subcontracts are awarded to small business firms, minority firms, women's business enterprises, and labor surplus area firms:

- (a) Placing qualified small and minority businesses and women's business enterprises on solicitation lists;
- (b) Ensuring that small and minority businesses and women's business enterprises are solicited whenever they are potential sources;
- (c) Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses and women's business enterprises;
- (d) Establishing delivery schedules, where the requirements of the contract permit, which encourage participation by small and minority businesses and women's business enterprises; and
- (e) Using the services and assistance of the U.S. Small Business Administration, the Minority Business Development Agency of the U.S. Department of Commerce, and State and local governmental small business agencies.

39. Equal Employment Opportunity

During the performance of this contract, the Contractor/Seller agrees as follows:

- (a) The Contractor/Seller shall not discriminate against any employee or applicant for employment because of race color, religion, sex, sexual orientation, gender identity, disability, or national origin.
- (b) The Contractor/Seller shall take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, sexual orientation, gender identity, disability, or national origin. Such action shall include, but not be limited to, (1) employment, (2) upgrading demotion, (4) transfer, (5) recruitment or recruitment advertising, (6) layoff or termination, (7) rates of pay or other forms of compensation, and (8) selection for training, including apprenticeship

(c) The Contractor/Seller agrees to post in conspicuous places available to employees and applicants for employment the notices to be provided by the Contracting Officer setting forth the provisions of this nondiscrimination clause.

(d) The Contractor/Seller shall, in all solicitations or advertisements for employees placed by or on behalf of the Contractor/Seller, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

(e) The Contractor/Seller shall send, to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, the notice to be provided by the Contracting Officer advising the labor union or workers' representative of the Contractor's commitments under this clause, and post copies of the notice in conspicuous places available to employees and applicants for employment.

(f) The Contractor/Seller shall comply with Executive Order 11246, as amended, and the rules, regulations, and orders of the Secretary of Labor.

(g) The Contractor/Seller shall furnish all information and reports required by Executive Order 11246, as amended, Section 503 of the Rehabilitation Act of 1973, as amended, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto. The Contractor/Seller shall permit

access to its books, records, and accounts by the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(h) In the event of a that the Contractor/Seller is in noncompliance with the nondiscrimination clauses of this contract or with any of such rules, regulations, or orders, this contract may be canceled, terminated or suspended in whole or in part and the contractor/seller may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(i) The contractor/seller will include the provisions of paragraphs (a) through (h) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each sub[contractor/seller] or vendor. The [contractor/seller] will take such action with respect to any subcontract or purchase order as may be directed by the Secretary of Labor as a means of enforcing such provisions including sanctions for noncompliance: Provided, however, that in the event the [contractor/seller] becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction, the [contractor/seller] may request the United States to enter into such litigation to protect the interests of the United States.

(j) Compliance with the requirements of this clause shall be to the maximum extent consistent with, but not in derogation of, compliance with section 7(b) of the Indian Self-Determination and Education Assistance Act and the Indian Preference clause of this contract.

40. Employment, Training, and Contracting Opportunities for Low-Income Persons, Section 3 of the Housing and Urban Development Act of 1968.

(a) The work to be performed under this contract is subject to the requirements of Section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. 1701u (section 3). The purpose of section 3 is to ensure that employment and other economic opportunities generated by HUD assistance or HUD-assisted projects covered by Section 3, shall, to the greatest extent feasible, be directed to low- and very low-income persons, particularly persons who are recipients of HUD assistance for housing.

(b) The parties to this contract agree to comply with HUD's regulations in 24 CFR Part 75, which implement Section 3. As evidenced by their execution of this contract, the parties to this contract certify that they are under no contractual or other impediment that would prevent them from complying with the Part 75 regulations.

(c) The contractor agrees to send to each labor organization or representative of workers with which the contractor has a collective bargaining agreement or other understanding, if any, a notice advising the labor organization or workers' representative of the contractor's commitments under this section 3 clause and will post copies of the notice in conspicuous places at the work site where both employees and applicants for training and employment positions can see the notice. The notice shall describe the Section 3 prioritization requirements and shall state the minimum percentages of labor hour requirements established in the Benchmark Notice (FR-6085-N-04).

(d) The contractor agrees to include this section 3 clause in every subcontract subject to compliance with regulations in 24 CFR Part 75, and agrees to take appropriate action, as provided in an applicable provision of the subcontract or in this section 3 clause, upon a finding that the subcontractor is in violation of the regulations in 24 CFR Part 75. The contractor will not subcontract with any subcontractor where the contractor has notice or knowledge that the subcontractor has been found in violation of the regulations in 24 CFR Part 75.

(e) Noncompliance with HUD's regulations in 24 CFR Part 75 may result in sanctions, termination of this contract for default, and debarment or suspension from future HUD assisted contracts.

(f) Contracts, subcontracts, grants, or subgrants subject to Section 7(b) of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 5307(b)) or subject to tribal preference requirements as authorized under 101(k) of the Native American Housing Assistance and Self-Determination Act (25 U.S.C. 4111(k)) must provide preferences in employment, training, and business opportunities to Indians and Indian organizations, and are therefore not subject to the requirements of 24 CFR Part 75.

41. Interest of Members of Congress

No member of or delegate to the Congress of the United States of America shall be admitted to any share or part of this contract or to any benefit that may arise therefrom.

42. Interest of Members, Officers, or Employees and Former Members, Officers, or Employees

No member, officer, or employee of the PHA, no member of the governing body of the locality in which the project is situated, no member of the governing body of the locality in which the PHA was activated, and no other public official of such locality or localities who exercises any functions or responsibilities with respect to the project, shall, during his or her tenure, or for one year thereafter, have any interest, direct or indirect, in this contract or the proceeds thereof.

43. Limitations on Payments made to Influence Certain Federal Financial Transactions

- (a) The Contractor agrees to comply with Section 1352 of Title 31, United States Code which prohibits the use of **Acts** Federal appropriated funds to pay any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, and officer or employee of Congress, or an employee of a Member of Congress in connection with any of the following covered Federal actions: the awarding of any Federal contract; the making of any Federal grant; the making of any Federal loan; the entering into of any cooperative agreement; or the modification of any Federal contract, grant, loan, or cooperative agreement.
- (b) The Contractor further agrees to comply with the requirement of the Act to furnish a disclosure (OMB Standard Form LLL, Disclosure of Lobbying Activities) if any funds other than Federal appropriated funds (including profit or fee received under a covered Federal transaction) have been paid, or will be paid, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with a Federal contract, grant, loan, or cooperative agreement.

44. Royalties and Patents

The Contractor shall pay all royalties and license fees. It shall defend all suits or claims for infringement of any patent rights and shall save the PHA harmless from loss on account thereof; except that the PHA shall be responsible for all such loss when a particular design, process or the product of a particular manufacturer or manufacturers is specified and the Contractor has no reason to believe that the specified design, process, or product is an infringement. If, however, the Contractor has reason to believe that any design, process or product specified is an infringement of a patent, the Contractor shall promptly notify the Contracting Officer. Failure to give such notice shall make the Contractor responsible for resultant loss.

45. Examination and Retention of Contractor's Records

- (a) The PHA, HUD, or Comptroller General of the United States, or any of their duly authorized representatives shall, until 3 years after final payment under this contract, have access to and the right to examine any of the Contractor's directly pertinent books, documents, papers, or other records involving transactions related to this contract for the purpose of making audit, examination, excerpts, and transcriptions.
- (b) The Contractor agrees to include in first-tier subcontracts under this contract a clause substantially the same as paragraph (a) above. "Subcontract," as used in this clause, excludes purchase orders not exceeding \$10,000.
- (c) The periods of access and examination in paragraphs (a) and (b) above for records relating to (1) appeals under the Disputes clause of this contract, (2) litigation or settlement of claims arising from the performance of this contract, or (3) costs and expenses of this contract to which the PHA, HUD, or Comptroller General or any of their duly authorized representatives has taken exception shall continue until disposition of such appeals, litigation, claims, or exceptions.

46. Labor Standards - Davis-Bacon and Related

If the total amount of this contract exceeds \$2,000, the Federal labor standards set forth in the clause below shall apply to the development or construction work to be performed under the contract.

- (a) Minimum Wages.
 - (1) All laborers and mechanics employed under this contract in the development or construction of the project(s) involved will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the Contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of 29 CFR 5.5(a)(1)(iv); also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the regular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits in the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein; provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under 29 CFR 5.5(a)(1)(ii) and the Davis-Bacon poster (WH-1321) shall

be posted at all times by the Contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

(2) (i) Any class of laborers or mechanics, including

helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. HUD shall approve an additional classification and wage rate and fringe benefits therefor only when all the following criteria have been met: (A) The work to be performed by the classification requested is not performed by a classification in the wage determination; and (B) The classification is utilized in the area by the construction industry; and (C) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(ii) If the Contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and HUD or its designee agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by HUD or its designee to the Administrator of the Wage and Hour Division, Employee Standards Administration, U.S.

Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary.

(iii) In the event the Contractor, the laborers or mechanics to be employed in the classification or their representatives, and HUD or its designee do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), HUD or its designee shall refer the questions, including the views of all interested parties and the recommendation of HUD or its designee, to the Administrator of the Wage and Hour Division for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary.

(iv) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (a)(2)(ii) or (iii) of this clause shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in classification.

(3) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the Contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(4) If the Contractor does not make payments to a trustee or other third person, the Contractor may consider as part of the wages of any laborer or mechanic the

amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program; provided, that the Secretary of Labor has found, upon the written request of the Contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the Contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

(b) Withholding of funds. HUD or its designee shall, upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the Contractor under this contract or any other Federal contract with the same prime Contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime Contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the Contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working in the construction or development of the project, all or part of the wages required by the contract, HUD or its designee may, after written notice to the Contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased. HUD or its designee may, after written notice to the Contractor, disburse such amounts withheld for and on account of the Contractor or subcontractor to the respective employees to whom they are due.

(c) Payrolls and basic records.

(1) Payrolls and basic records relating thereto shall be maintained by the Contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working in the construction or development of the project. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made, and actual wages paid. Whenever the Secretary of Labor has found, under 29 CFR 5.5(a)(1)(iv), that the wages of any laborer or mechanic include the amount of costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the Contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(2) (i) The Contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the Contracting Officer for transmission to HUD or its designee. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under subparagraph (c)(1) of this clause. This information may be submitted in any form desired. Optional Form WH-347 (Federal Stock Number 029-005-00014-1) is available for this purpose and may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. The Contractor is responsible for the submission of copies of payrolls by all subcontractors. (Approved by the Office of Management and Budget under OMB Control Number 1214-0149.)

(ii) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the Contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

- (A) That the payroll for the payroll period contains the information required to be maintained under paragraph (c) (1) of this clause and that such information is correct and complete;
 - (B) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR Part 3; and
 - (C) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.
- (iii) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirements for submission of the "Statement of Compliance" required by subparagraph (c)(2)(ii) of this clause.
- (iv) The falsification of any of the above certifications may subject the Contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 3729 of Title 31 of the United States Code.

(3) The Contractor or subcontractor shall make the records required under subparagraph (c)(1) available for inspection, copying, or transcription by authorized representatives of HUD or its designee, the Contracting Officer, or the Department of Labor and shall permit such representatives to interview employees during working hours on the job. If the Contractor or subcontractor fails to submit the required records or to make them available, HUD or its designee may, after written notice to the Contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to

make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

(d) (1) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship and Training, Employer and Labor Services (OATELS), or with a State Apprenticeship Agency recognized by OATELS, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by OATELS or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the Contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in this paragraph, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the Contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator of the Wage and Hour Division determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event OATELS, or a State Apprenticeship Agency recognized by OATELS, withdraws approval of an apprenticeship program, the Contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(2) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under

the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed in the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate in the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate in the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate in the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the Contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

- (3) Equal employment opportunity. The utilization of apprentices, trainees, and journeymen under this clause shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.
- (e) Compliance with Copeland Act requirements. The Contractor shall comply with the requirements of 29 CFR Part 3, which are hereby incorporated by reference in this contract.
- (f) Contract termination; debarment. A breach of this contract clause may be grounds for termination of the contract and for debarment as a Contractor and a subcontractor as provided in 29 CFR 5.12.
- (g) Compliance with Davis-Bacon and related Act requirements. All rulings and interpretations of the Davis-Bacon and related Acts contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this contract.
- (h) Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this clause shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR Parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the Contractor (or any of its subcontractors) and the PHA, HUD, the U.S. Department of Labor, or the employees or their representatives.
- (i) Certification of eligibility.
 - (1) By entering into this contract, the Contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the Contractor's firm is a person or firm ineligible to be awarded contracts by the United States Government by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

- (2) No part of this contract shall be subcontracted to any person or firm ineligible for award of a United States Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- (3) The penalty for making false statements is prescribed in the U. S. Criminal Code, 18 U.S.C. 1001.
- (j) Contract Work Hours and Safety Standards Act. As used in this paragraph, the terms "laborers" and "mechanics" include watchmen and guards.
 - (1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics, including watchmen and guards, shall require or permit any such laborer or mechanic in any workweek in which the individual is employed on such work to work in excess of 40 hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of 40 hours in such workweek.
 - (2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the provisions set forth in subparagraph (j)(1) of this clause, the Contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such Contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic (including watchmen and guards) employed in violation of the provisions set forth in subparagraph (j)(1) of this clause, in the sum of \$27 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of 40 hours without payment of the overtime wages required by provisions set forth in subparagraph (j)(1) of this clause. DOL posts current fines at: <https://www.dol.gov/whd/govcontracts/cwhssa.htm#cmp>
 - (3) Withholding for unpaid wages and liquidated damages. HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the Contractor or subcontractor under any such contract or any Federal contract with the same prime Contractor, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime Contractor, such sums as may be determined to be necessary to satisfy any liabilities of such Contractor or subcontractor for unpaid wages and liquidated damages as provided in the provisions set forth in subparagraph (j)(2) of this clause.
- (k) Subcontracts. The Contractor or subcontractor shall insert in any subcontracts all the provisions contained in this clause, and such other clauses as HUD or its designee may by appropriate instructions require, and also a clause requiring the subcontractors to include these provisions in any lower tier subcontracts. The prime Contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all these provisions.

47. Non-Federal Prevailing Wage Rates

(a) Any prevailing wage rate (including basic hourly rate and any fringe benefits), determined under State or tribal law to be prevailing, with respect to any employee in any trade or position employed under the contract, is inapplicable to the contract and shall not be enforced against the Contractor or any subcontractor, with respect to employees engaged under the contract whenever such non-Federal prevailing wage rate exceeds:

(1) The applicable wage rate determined by the Secretary of Labor pursuant to the Davis-Bacon Act (40 U.S.C. 3141 et seq.) to be prevailing in the locality with respect to such trade;

(b) An applicable apprentice wage rate based thereon specified in an apprenticeship program registered with the U.S. Department of Labor (DOL) or a DOL-recognized State Apprenticeship Agency; or

(c) An applicable trainee wage rate based thereon specified in a DOL-certified trainee program.

48. Procurement of Recovered Materials.

(a) In accordance with Section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act, the Contractor shall procure items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR Part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition. The Contractor shall procure items designated in the EPA guidelines that contain the highest percentage of recovered materials practicable unless the Contractor determines that such items: (1) are not reasonably available in a reasonable period of time; (2) fail to meet reasonable performance standards, which shall be determined on the basis of the guidelines of the National Institute of Standards and Technology, if applicable to the item; or (3) are only available at an unreasonable price.

() Paragraph (a) of this clause shall apply to items purchased under this contract where: (1) the

Contractor purchases in excess of \$10,000 of the item under this contract; or (2) during the preceding Federal fiscal year, the Contractor: (i) purchased any amount of the items for use under a contract that was funded with Federal appropriations and was with a Federal agency or a State agency or agency of a political subdivision of a State; and (ii) purchased a total of in excess of \$10,000 of the item both under and outside that contract.

**SECTION 00 7300
MODIFICATIONS TO GENERAL CONDITIONS**

PART 1 GENERAL

1.01 SUMMARY

- A. The following modify, change, delete from, or add to the "General Conditions of the Contract for Construction", HUD Form 5370, (1/2014) edition. Where any Article of the General Conditions is modified, or any Paragraph, Subparagraph, or Clause thereof is modified or deleted herein, the unaltered provisions of the Article, Paragraph, Subparagraph, or Clause shall remain in effect.

1.02 MODIFICATIONS TO GENERAL CONDITIONS

- A. ARTICLE 12: PERMITS AND CODES
1. Modify (b) to read "The Owner shall secure and pay for all permits in conjunction with the IBC and IRBC. Any other permits shall be secured and paid for the the Prime Contracts requiring the permit. Each Prime Contrator shall be responsible for scheduling required inspections by governing code officials.
- B. ARTICLE 23: WARRANTY OF CONSTRUCTION
1. Modify (a) to read as follows:
- a. This warranty shall continue for a period of 1 (ONE) year unless otherwise indicated from the date of final acceptance of the work. If the PHA/IHA takes possession of any part of the work before final acceptance, this warranty shall continue for a period of 1 (ONE) year unless otherwise indicated) from the date that the PHA/IHA takes possession."
- C. ARTICLE 27: PAYMENTS
1. Modify (d) to read as follows: "Such estimates shall be submitted not later than 30 (thirty) days in advance of the date set for payment and are subject to correction and revision as required."
- D. ARTICLE 33: LIQUIDATED DAMAGES
1. Modify (d) as Follows: " . .PHA/IHA as liquidated damages, the sum of \$250.00 (Two Hundred Fifty Dollars) for each day of delay."
- E. ARTICLE 49: ACCESS TO ACCOUNTING RECORDS
1. The Contractor shall check all materials, equipment, and labor entering into the Work and shall keep such full and detailed accounts as may be necessary for proper financial management under this Agreement, and the Authority shall be afforded access to all the Contractor's records, books, correspondence, instructions, drawings, receipts, vouchers, memoranda, and similar data relating to this Contract, and the Contractor shall preserve all such records for a period of three years, or for such longer period as may be required by law, after the final payment.
- F. ARTICLE 50: ASSIGNMENT OF REFUND RIGHTS
1. The Westmoreland County Housing Authority shall supply to the successful Bidder the Westmoreland County Housing Authority's tax exempt number for the purchase of applicable materials as suited to the materials contained within these Contract Documents only. The successful bidder bears the responsibility for determination of qualifying materials.
- G. ARTICLE 51: CONTRACTS WITH SUBCONTRACTORS
1. The Contractor agrees to include the "Access to Accounting Records" and "Assignment of Refund Rights" paragraphs, in full, in any contracts with subcontractors.
- H. ARTICLE 52: ASBESTOS REMOVAL OR LEAD BASED PAINT ACTIVITIES

1. Contractor shall notify the Westmoreland County Housing Authority of ANY written or oral communications with EPA, DEP, or OSHA related to this Contract. Contractor MUST forward copies of all correspondence of any type related to this Contract between the Contractor and the aforesaid agencies, regardless of the nature of the same, as said communications or correspondence pertain to this Contract. THIS APPLIES TO ANY PROJECT WHICH INCLUDES ASBESTOS REMOVAL OR LEAD PAINT ACTIVITIES.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF DOCUMENT

2335	Modifications to General Conditions	00 7300 - 2
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SECTION 00 7310
SECTION 1 OF THE SUPPLEMENTARY CONDITIONS
TO CONSTRUCTION CONTRACT AND SPECIFICATIONS

EQUAL EMPLOYMENT OPPORTUNITY

ATTENTION OF BIDDERS IS PARTICULARLY CALLED TO THE REQUIREMENT FOR ENSURING THAT EMPLOYEES AND APPLICANTS FOR EMPLOYMENT ARE NOT DISCRIMINATED AGAINST BECAUSE OF THEIR RACE, COLOR, RELIGION, SEX, OR NATIONAL ORIGIN. (SEE SUPPLEMENTARY GENERAL CONDITIONS AND AFFIRMATIVE ACTION NOTICE BELOW.)

NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY EXECUTIVE ORDER 11246.

- A. The Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contracts Specifications" as set forth herein. (See Supplementary General Conditions - Section 1).
- B. The goals for minority, female and resident participation expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction works in the covered area are as follows:
 - 1. FEMALES – The following goals for female utilization shall be included in all Federal and Federally assisted construction contracts and subcontracts in excess of \$10,000. The goals are applicable to the Contractor's aggregate on-site construction workforce whether or not part of that workforce is performing on a Federal or Federally assisted construction contract or subcontract.
 - 2. MINORITIES – Until further notice, the following goals for minority utilization shall be included in all Federal assisted construction and subcontracts in excess of \$10,000 to be performed in the respective covered area. The goals are applicable to the Contractor's aggregate on-site construction workforce whether or not part of the workforce is performing work on a Federal or Federally assisted construction contract or subcontract.
 - a. Goals: Minorities 5%, Females 6.9%
 - b. These goals are applicable to all the Contractor's construction work (whether or not it is Federal or Federally assisted) performed in the covered area.
 - c. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and nonfederally involved construction.
 - d. The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity clause specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a) and its efforts to meet the goals established for the geographical area where the contract resulting from this solicitation is to be performed. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract and in the trade and the Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the Contract, the Executive Order and the regulations in 41 CFR Part 60-4 compliance with the goals will be measured against the total work hours performed.

- C. The contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Program within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor, employer identification number, estimated dollar amount of the subcontract, estimated starting and completion date of the subcontract and the geographical area in which the contract is to be performed.
- D. As used in this Notice, and in the contract resulting from this solicitation, the "covered area" is the project site municipality, Westmoreland County, Pennsylvania.

EMPLOYMENT OPPORTUNITIES FOR LWER INCOME PERSONS

Attention of bidders is particularly called to the requirements concerning provisions for training, employment, and business opportunities, to the maximum extent feasible, for lower income residents residing in the project area, as defined by the U.S. Housing and Urban Development Agency.

Prior to execution of a contract, the accepted Bidder must submit the following:

1. Good Faith Effort and Compliance Certification;
2. Preliminary Statement of Work Force Needs of Skilled, semi-skilled, unskilled labor and trainees by category and subcontract requirement;
3. Affirmative Action Plan for utilization of project area residents and businesses eligible under Section 3 of the U.S. Housing and Urban Development Act of 1968.
- 4.

The above submissions shall be in form and manner as directed by the Authority. For more specific requirements, the Bidder must read Section II of the Supplementary General conditions. If additional clarification of the requirements for compliance with the terms of the Contract Documents relative to Section 3 is necessary, the Bidder should contact the Affirmative Action Officer at the Authority's Office.

END OF SECTION

SECTION 00 7320
SECTION II OF THE SUPPLEMENTARY GENERAL CONDITIONS
TO CONSTRUCTION CONTRACT AND SPECIFICATIONS
STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY

- A. As used in these specifications:
1. "Covered area" means the geographical area described in the solicitation from which this contract resulted;
 2. "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of labor, or any persons to whom the Director delegates authority;
 3. "Employer Identification Number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.
 4. "Minority" includes:
 - a. Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
 - b. Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish culture or origin, regardless of race);
 - c. Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands; and
 - d. American Indian or Alaskan Native (all persons having origins in any of the original peoples of North American and maintaining identifiable tribal affiliations through membership and participation or community identification).
- B. Whenever the Contractor or any Subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000, the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.
- C. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U. S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goal and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or Subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractor's or Subcontractors failure to take good faith efforts to achieve the Plan goals and timetables.
- D. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7a through p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization of the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. The contractor is expected to make substantially uniform progress toward its goals in each craft during the period specified.
- E. Neither the provisions of any collective bargaining agreement nor the failure by a union with whom the Contractor has a collective bargaining agreement to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.

- F. In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U. S. Department of Labor.
- G. The Contractor shall take specific affirmative action to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its action. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:
1. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foreman, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment with specific attention to minority or female individuals working at such sites or in such facilities.
 2. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organization responses.
 3. Maintain a current file of the names, addresses, and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefor, along with whatever additional actions the Contractor may have taken.
 4. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or women sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.
 5. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources complied under 7b above.
 6. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations by including it in any policy manual and collective bargaining agreement by publicizing it in the company newspaper, annual report, etc; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.
 7. Review, at least annually, the company's EEO policy and affirmative, layoff, termination, or other employment decisions including specific review of these items with on-site supervisory personnel such as superintendents, general foreman, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.

8. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and Subcontractors with whom the Contractor does or anticipates doing business.
 9. Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by recruitment sources, the Contractor shall send written notification to the organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.
 10. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a Contractor's work force.
 11. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR 60-3.
 12. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities
 13. Ensure that seniority, job classifications, work assignments, and other personnel practices do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.
 14. Ensure that all facilities and company activities are non-segregated except that separate or single user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
 15. Document and maintain a record of all solicitations of offers for subcontractors from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.
 16. Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.
- H. Contractors are encouraged to participate in voluntary associations, which assist in fulfilling one or more of their affirmative action obligations (7a through p). The efforts of a contractor association, joint contractor-union, contractor community, or other similar group of which the contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7a through p of these Specifications provided that the contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensure that the concrete benefits of the program are reflected in the contractor's minority and female workforce participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.
- I. A single goal for minorities and a separate single goal for women have been established. The Contractor, however is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women, generally, the Contractor may be in violation of the Executive Order if a specific minority group of women is utilized).
- J. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex or national origin.

- K. The Contractor shall not enter into any subcontract with any person or firm debarred from government contracts pursuant to Executive Order 11246.
- L. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and is implementing regulations, by the Office of Federal Contract Compliance Programs. Any contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive order 11246, as amended.
- M. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.
- N. The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the government and to keep records. Records shall at least include for each employee the name, address, telephone number, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g. mechanic apprentice trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form, however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.
- O. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon application of requirements for the hiring of local or other area residents (e.g. those under the Public Works Employment Act of 1977 and Community Development Block Grant Program).

2.01 EQUAL EMPLOYMENT OPPORTUNITY CLAUSE

- A. During the performance of this contract, the Contractor agrees as follows:
 - 1. The Contractor will not discriminate against any employees or applicant for employment because of race, color, religion, sex or national origin. The Contractor will take affirmative action to ensure that applicants are employed and that employees are treated during employment without regard to their race, color, religion, sex or national origin. Such action shall include, but not be limited to, the following: Employment, upgrading, demotion or transfer, recruitment or recruitment advertising, lay-off or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places available to employees and applicants for employment, notices to be provided setting forth the provisions of this non-discrimination clause.
 - 2. The Contractor will, in all solicitations or advertisements for employees, placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex or national origin.
 - 3. The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract, or understanding a notice to be provided by the Contract Compliance Officer advising the said labor union or workers' representative of the Contractor's commitment under this section and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
 - 4. The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations and relevant orders of the Secretary of Labor.

5. The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records and accounts by the Department and the Secretary of labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
6. In the event of the Contractor's noncompliance with the nondiscrimination clauses of this Contract or with any of the said rules, regulations or orders, this contract may be canceled, terminated or suspended in whole or in part and the Contractor may be declared ineligible for further government contacts or federally assisted construction contracts in accordance with procedures authorized by Executive Order 11246 of September 24, 1965 or by rule, regulations or order of the Secretary of Labor, or as otherwise proved by law.
7. The Contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraph (1) and (7) in every subcontract or purchase order unless exempted to section 204 of the Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontractor or purchase order as the Department may direct as a means of enforcing such provisions, including sanctions for noncompliance; provided however, that in the event a Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result if such direction by the Department, the Contractor may request the United States to enter into such litigation to protect the interest of the United States.

END OF SECTION

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SECTION 00 7330
SECTION 3 OF THE HOUSING AND URBAN DEVELOPMENT ACT OF 1968
PART OF GENERAL CONDITIONS
PROVISIONS AND PROCEDURES
PERTAINING TO
BUSINESS OPPORTUNITIES FOR BUSINESS AND LOWER INCOME PERSONS
IN CONNECTION WITH FEDERAL ASSISTED PROJECTS
IN COMPLIANCE WITH
SECTION 3 OF THE HOUSING AND URBAN DEVELOPMENT ACT OF 1968

1.01 SEC. 41PURPOSE AND SCOPE

- A. The regulations set forth in this contain the procedures established by the Secretary of housing and Urban Development for carrying out the responsibilities under Section 3 of the Housing and Urban Development Act of 1968, 12 U.S.C. 1701u.

1.02 SEC. 42DEFINITIONS

- A. Section 3 covered project” means any non-exempt project assisted by any program administered by the Secretary in which loans, grants, subsidies, or other financial assistance are provided in aid of housing, urban planning, development, re-development or renewal, public or community facilities, and new community facilities, and new community development, except as provided under Title 24, Part 135, Section 135.5, paragraph. (M)

1.03 SEC 4.3ASSURANCE OF COMPLIANCE

- A. Every contractor and subcontractor shall incorporate, or cause to be incorporated, in all contracts for work in connection with a Section 3 covered project, the following clause:
- B. The work to be performed under this contract is on a project assisted under a program providing direct Federal financial assistance from the Department of Housing and Urban Development and is subject to the requirements of Section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. 1701c. Section 3 required that to the greatest extent feasible, opportunities for training and employment be given to lower income residents of the project area and contracts for work in connection with the project be awarded to business concerns which are located in, or owned in substantial part by, persons residing in the area of the project.
- C. The parties to this contract agree to comply with the provisions of said Section 3 and regulations issued pursuant thereto by the Secretary of Housing and Urban Development set forth in 24 CFE, and all applicable rules and orders of the Department issued thereunder prior to the execution of this contract. The parties to this contract certify and agree that they are under no contractual or other disability which prevent them from complying with these requirements.
- D. The contractor will send to each labor organization or representative of workers with which he has a collective bargaining agreement or other contract or understanding, if any, a notice advising the said labor organization or workers' representative of his commitments under this Section 3 clause and shall post copies of the notice in conspicuous places available to employees and applicants for employment or training.

- E. The contractor will include this Section 3 clause in every subcontract for work in connection with the project and will, at the direction of the applicant for or recipient of, Federal financial assistance, take appropriate action pursuant to the subcontract upon finding that the subcontractor is in violation of regulations issued by the Secretary of Housing and Urban Development, 24 CFR--, the contractor will not subcontract where it has notice of knowledge that the latter has been found in violation of regulations under 24 CFR and will not let any subcontract unless the subcontractor has first provided it with a preliminary statement of ability to comply with the requirements of these regulations.
- F. Compliance with the provisions of Section 3, the regulations set forth in 24 CFR and all applicable rules and order of the Department issued thereunder prior to the execution of the contract shall be a condition of the Federal financial assistance provided to the project, binding upon the applicant or recipient for such assistance, its successors, and assigns. Failure to fulfill these requirements shall subject the applicant or recipient, its contractors and subcontractors, its successors, and assigns, to those sanctions specified by the grant or loan agreement of contract through which Federal assistance is provided, and to such sanctions as are specified by 24 CFR.

1.04 SEC.4.4BIDDING PROCEDURES

- A. Prior to the signing of the contract, the contractor shall provide a preliminary statement of work force needs, (skilled, semi-skilled, unskilled labor and trainees by category) where known; where not known, such information shall be supplied prior to the signing of any contract between the contractor and subcontractors.
- B. Trainees
 - 1. The contractor or subcontractor shall fulfill his obligation to utilize lower income project area residents as trainees to the greatest extent feasibility by:
 - a. Utilizing the phases of the work to be performed under the Section 3 covered project, and;
 - b. Filing all vacant training positions with lower income project area residents except for those training positions which remain unfilled after a good faith effort has been made;
 - c. "Manpower Utilization Training Table" = See Appendix #1.
- C. Residents as Employees
 - 1. Each contractor and subcontractor shall fulfill his obligation to utilize lower income project area residents as employees to the greatest extent feasible by:
 - 2. Identifying the number of positions in the various occupational categories including skilled, semi-skilled, and unskilled labor needed to perform each phase of the Section 3 covered project.
 - 3. Identifying the number of positions currently occupied by regular, permanent employees.
 - 4. Identifying the positions not currently occupied by regular permanent employees.
 - 5. Establishing the positions identified in sub-paragraph 3) of this part, a goal which is consistent with this subpart within each occupational category of the number of positions to be filled by lower income residents of the Section 3 covered project area.
 - 6. "Work Force Needs Table" – See Appendix #1.
- D. Utilization of Businesses
 - 1. Each contractor and subcontractor undertaking work on a Section 3 covered project shall assure that, to the greatest extent feasible, contracts for work to be performed in connection with the project, are awarded to business concerns located within the Section3 covered project area or business concerns owned in substantial part by persons residing in the Section 3 covered area.
 - 2. "Business Utilization Table" – See Appendix #2.

1.05 SEC. 4.5GOOD FAITH EFFORT

- A. Each contractor and subcontractor seeking to establish that a good faith effort, as required by Section 3 of the Housing And Urban Development Act of 1968, as amended 12 U.S.C., 1701u, has been made to fill all training positions with lower income area residents; and fill all employment positions identified in Section 4.4, paragraph B, subparagraphs 3) and 4) shall:
- B. Attempt to recruit from the appropriate areas the necessary number of lower income residents through local advertising media, signs placed at the proposed site and community organizations and public and private institutions operating within or serving the project area, such as State Employment Office, Opportunities Industrial Center (OIO), etc.
- C. Maintain a list of all lower income area residents who have applied either on their own or on referral from any source, and employ such persons if otherwise eligible and/or qualified and if a vacancy exists. If no vacancies exist, the eligibility and/or qualifications of the applicant shall be considered and listed for the first available opening.
- D. Any contractor or subcontractor which fills vacant apprentice and trainee positions and/or employment positions, identified in subparagraph B above, but more specifically identified in Section 3 of the Housing and Urban Development Act of 1968, 12 U.S.C. 1701u, Part 135, Section 135.40 and Section 135.55, in his organization immediately prior to undertaking work pursuant to a Section 3 covered contract shall set forth evidence acceptable to the Secretary that its actions were not an attempt to circumvent these regulations.

1.06 SEC. 4.6AFFIRMATION ACTION PLAN

- A. An Affirmative Action Plan pursuant to a Section 3 covered contract shall:
 - 1. Set forth the approximate number and estimated dollar value of contracts to be awarded to eligible business and entrepreneurs within each category over the duration of this contract.
 - 2. Ensure that the appropriate business concerns are notified of pending contractual opportunities either personally or through locally utilized media.
- B. Good Faith Effort
Each contractor and subcontractor seeking to establish that a good faith effort has been made shall, as a minimum, attempt to recruit from the appropriate areas, the necessary eligible business concerns through:
 - 1. Local advertising;
 - 2. Signs placed at the site;
 - 3. Community organizations, public and private institutions operating or serving within the project area such as P.A.C., OIC, etc.
- C. "Business Utilization Table"
See Appendix #1.
- D. "AAP Form"
See Appendix #2.

APPENDIX No. 1

1. 1. MANPOWER UTILIZATION TABLE

Occupation Category (write List)	Total Work Force	Skilled	Trained	No. Project Area Residents to be Utilized Skilled Trained
Totals				

1.07 EMPLOYMENT CERTIFICATION

- A. The Company hereby certifies that the above table () represents the appropriate number of employee positions required in the execution of _____ Contract No. _____ and also represents the number of lower income project area residents that the Company proposes to employ.
- B. The Company certifies that it will make a good faith effort to employ the number of low income employees stated above utilizing such community based organizations and service agencies as _____, Opportunities Industrialization Center (OIC); and on the site company posters.
- C. The Company certifies that the employee goals listed in the above table approximates the ration of lower income residents to the total population of the project area.

Company _____

By _____

Authorized Signature

Title _____

APPENDIX NO. 2

AFFIRMATIVE ACTION PLAN FOR UTILIZATION OF SECTION 3 PROJECT BUSINESS

The company shall utilize business concerns located in Project No. _____ in contracting for work to be performed in connection with the completion of the contract. To this end, the Company shall require the services of companies in the project area engaged in the business of

Total Subcontractors (write List)	Subcontracts Dollar Amount	Proposed Section 3 Business Available	Total Subcontract to Section 3 Business
Totals			

Company _____

By _____

Authorized Signature

Title _____

1.08 SECTION 4.7 CERTIFICATION OF COMPLIANCE

The Contractor shall execute the Certificate of compliance and cause all subcontractors undertaking work in connection with this contract to furnish the same.

2335	Section 3 of the Housing and Urban Development Act of 1968	00 7330 - 4
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SECTION 3 CERTIFICATION

_____ will abide by and initiate in all their subcontracts to the greatest extent feasible the requirements of Section 3 of the Housing and Urban Development Act of 1968, 12 U.S.C., 170 lu.

_____ Company

BY _____
Authorized Signature

END OF SECTION

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**SECTION 00 7340
HUD 2530 PREVIOUS PARTICIPATION**

FORM FOR PREVIOUS PARTICIPATION

**1.01 THE HUD 2530 PREVIOUS PARTICIPATION CERTIFICATION APPLICABLE TO THIS
CONTRACT IS ATTACHED FOLLOWING THIS PAGE.**

END OF SECTION

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US Department of Housing and Urban Development
Office of Housing/Federal Housing Commissioner

US Department of Agriculture
Farmers Home Administration

Part I to be completed by Controlling Participant(s) of Covered Projects <i>(See instructions)</i> Reason for submission:		For HUD HQ/FmHA use only	
1. Agency name and City where the application is filed		2. Project Name, Project Number, City and Zip Code	
3. Loan or Contract amount \$	4. Number of Units or Beds	5. Section of Act	6. Type of Project (check one) ☐ Existing ☐ Rehabilitation ☐ Proposed (New)
7. List all proposed Controlling Participants and attach complete organization chart for all organizations showing ownership %			
Name and address (Last, First, Middle Initial) of controlling participant(s) proposing to participate		8 Role of Each Principal in Project	
		9. SSN or IRS Employer Number (TIN)	

1. Schedule A contains a listing, for the last ten years, of every project assisted or insured by HUD, USDA FmHA and/or State and local government housing finance agencies in which the controlling participant(s) have participated or are now participating.
2. For the period beginning 10 years prior to the date of this certification, and except as shown on the certification:
- a. No mortgage on a project listed has ever been in default, assigned to the Government or foreclosed, nor has it received mortgage relief from the mortgagee;
 - b. The controlling participants have no defaults or noncompliance under any Conventional Contract or Turnkey Contract of Sale in connection with a public housing project;
 - c. There are no known unresolved findings as a result of HUD audits, management reviews or other Governmental investigations concerning the controlling participants or their projects;
 - d. There has not been a suspension or termination of payments under any HUD assistance contract due to the controlling participant's fault or negligence;
 - e. The controlling participants have not been convicted of a felony and are not presently the subject of a complaint or indictment charging a felony. (A felony is defined as any offense punishable by imprisonment for a term exceeding one year, but does not include any offense classified as a misdemeanor under the laws of a State and punishable by imprisonment of two years or less);
 - f. The controlling participants have not been suspended, debarred or otherwise restricted by any Department or Agency of the Federal Government or of a State Government from doing business with such Department or Agency;
 - g. The controlling participants have not defaulted on an obligation covered by a surety or performance bond and have not been the subject of a claim under an employee fidelity bond;
 - 3. All the names of the controlling participants who propose to participate in this project are listed above.
 - 4. None of the controlling participants is a HUD/FmHA employee or a member of a HUD/FmHA employee's immediate household as defined in Standards of Ethical Conduct for Employees of the Executive Branch in 5 C.F.R. Part 2635 (57 FR 35006) and HUD's Standard of Conduct in 24 C.F.R. Part 0 and USDA's Standard of Conduct in 7 C.F.R. Part 0 Subpart B.
 - 5. None of the controlling participants is a participant in an assisted or insured project as of this date on which construction has stopped for a period in excess of 20 days or which has been substantially completed for more than 90 days and documents for closing, including final cost certification, have not been filed with HUD or FmHA.
 - 6. None of the controlling participants have been found by HUD or FmHA to be in noncompliance with any applicable fair housing and civil rights requirements in 24 CFR 5.105(a). (If any controlling participants have been found to be in noncompliance with any requirements, attach a signed statement explaining the relevant facts, circumstances, and resolution, if any).
 - 7. None of the controlling participants is a Member of Congress or a Resident Commissioner nor otherwise prohibited or limited by law from contracting with the Government of the United States of America.
 - 8. Statements above (if any) to which the controlling participant(s) cannot certify have been deleted by striking through the words with a pen, and the controlling participant(s) have initiated each deletion (if any) and have attached a true and accurate signed statement (if applicable) to explain the facts and circumstances.
- I/We, the undersigned, certify under penalty of perjury that the information provided above is true and correct. **WARNING:** Anyone who knowingly submits a false claim or makes a false statement is subject to criminal and/or civil penalties, including confinement for up to 5 years, fines, and civil and administrative penalties. (18 U.S.C. §§ 287, 1001, 1010, 1011, 1012, 1014; 31 U.S.C. §3729, 3802).

Name of Controlling Participant	Signature of Controlling Participant	Certification Date (mm/dd/yyyy)	Area Code and Tel. No.
This form prepared by (print name)			Area Code and Tel. No.

Schedule A: List of Previous Projects and Section 8 Contracts. Below is a complete list of the controlling participants' previous participation projects and participation history in covered projects as per 24 CFR, part 200 §200.214 and multifamily Housing programs of FmHA, State and local Housing Finance Agencies, if applicable. **Note:** Read and follow the instruction sheet carefully. Make full disclosure. Add extra sheets if you need more space. Double check for accuracy. If no previous projects, write by your name, "**No previous participation, First Experience**".

1. Controlling Participants' Name (Last, First)	2. List of previous projects (Project name, project ID and, Govt. agency involved)	3. List Participants' Role(s) (indicate dates participated, and if fee or identity of interest participant)	4. Status of loan (current, defaulted, assigned, foreclosed)	5. Was the Project ever in default during your participation Yes No If yes, explain	6. Last MOR rating and Physical Insp. Score and date

Part II- For HUD Internal Processing Only

Received and checked by me for accuracy and completeness; recommend approval or refer to Headquarters after checking appropriate box.

Date (mm/dd/yyyy)	Tel No. and area code	☐ A. No adverse information; form HUD-2530 approval recommended.	☐ C. Disclosure or Certification problem
Staff	Processing and Control	☐ B. Name match in system	☐ D. Other (attach memorandum)
Signature of authorized reviewer	Signature of authorized reviewer	Approved ☐ Yes ☐ No	Date (mm/dd/yyyy)

Instructions for Completing the Previous Participation Certificate, form HUD-2530

Carefully read these instructions and the applicable regulations. A copy of the regulations published at 24 C.F.R. part 200, subpart H, § 200.210-200.222 can be obtained on-line at www.gpo.gov and from the Account Executive at any HUD Office. Type or print neatly in ink when filling out this form. Incomplete form will be returned to the applicant.

Attach extra sheets as you need them. Be sure to indicate "Continued on Attachments" wherever appropriate. Sign each additional page that you attach if it refers to you or your record. **Carefully read the certification before you sign it.** Any questions regarding the form or how to complete it can be answered by your HUD Account Executive.

Purpose: This form provides HUD/USDA FmHA with a certified report of all previous participation in relevant HUD/USDA programs by those parties submitting the application. The information requested in this form is used by HUD/USDA to determine if you meet the standards established to ensure that all controlling participants in HUD/USDA projects will honor their legal, financial and contractual obligations and are of acceptable risks from the underwriting standpoint of an insurer, lender or governmental agency. HUD requires that you certify and submit your record of previous participation, in relevant projects, by completing and signing this form, before your participation can be approved.

HUD approval of your certification is a necessary precondition for your participation in the project and in the capacity that you propose. If you do not file this certification, do not furnish the information requested accurately, or do not meet established standards, HUD will not approve your certification.

Note that approval of your certification does not obligate HUD to approve your project application, and it does not satisfy all other HUD program requirements relative to your qualifications.

Who Must Sign and File Form HUD-2530: Form HUD-2530 must be completed and signed by all Controlling Participants of Covered Projects, as such terms are defined in 24 CFR part 200 §200.212, and as further clarified by the Processing Guide (HUD notice H 2016-15) referenced in 24 CFR §200.210(b) and available on the HUD website at: http://portal.hud.gov/hudportal/HUD?src=/program_offices/housing/mfh/prevparticipation.

Where and When Form HUD-2530 Must Be Filed: The original of this form must be submitted to the HUD Office where your project application will be processed at the same time you file your initial project application. This form must be filed with applications for projects listed in 24 CFR §200.214 and for the Triggering Events listed at 24 CFR §200.218.

Review of Adverse Determination: If approval of your participation in a HUD project is denied, withheld, or conditionally granted on the basis of your record of previous participation, you will be notified by the HUD Office. You may request reconsideration in accordance with 24 CFR §200.222 and further clarified by the Processing Guide. Request must be made in writing within 30 days from your receipt of the notice of determination.

The Department of Housing and Urban Development (HUD) is authorized to collect this information by law 42 U.S.C. 3535(d) and by regulation at 24 CFR 200.210. This information is needed so that principals applying to participate in multifamily programs can become HUD-approved controlling participants. The information you provide will enable HUD to evaluate your record with respect to established standards of performance, responsibility and eligibility. Without prior approval, a controlling participant may not participate in a proposed or existing multifamily or healthcare project. HUD uses this information to evaluate whether or not controlling participants pose an unsatisfactory underwriting risk. The information is used to evaluate the potential controlling participants and approve only individuals and organizations that will honor their legal, financial and contractual obligations.

Privacy Act Statement: The Housing and Community Development Act of 1987, 42 U.S.C. 3543 requires persons applying for a Federally-insured or guaranteed loan to furnish his/her Social Security Number (SSN). HUD must have your SSN for identification of your records. HUD may use your SSN for automated processing of your records and to make requests for information about you and your previous records with other public agencies and private sector sources. HUD may disclose certain information to Federal, State and local agencies when relevant to civil, criminal, or regulatory investigations and prosecutions. It will not be otherwise disclosed or released outside of HUD, except as required and permitted by law. You must provide all of the information requested in this application, including your SSN. Failure to provide any of the information will result in your disapproval of participation in this HUD program. APPS SORN could be accessed in Federal Register / Vol. 81, No. 146 / Friday, July 29, 2016 / Notices ([Docket No. FR-5921-N-10] Implementation of the Privacy Act of 1974, as Amended; Amended System of Records Notice, Active Partners Performance System).

PRA Statement: The public reporting burden is estimated at 3 hours per response, including the time for reviewing instructions, searching existing data sources, gathering, and maintaining the data needed, and completing and reviewing the collection of information.

Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions to reduce this burden, to the Reports Management Officer, Paperwork Reduction Project, to the Office of Information Technology, US. Department of Housing and Urban Development, Washington, DC 20410-3600. When providing comments, please refer to OMB Approval No. 2502-0118. HUD may not conduct and sponsor, and a person is not required to respond to, a collection of information unless the collection displays a valid control number.

The collection is authorized by 12 U.S.C 1702-1715z; 42 U.S.C. 3535(d). HUD form 2530 is created to collect information as mandated by 24 CFR Part 200. The HUD-2530 form is used to protect HUD's Multifamily Housing and Healthcare programs by comprehensively assessing industry participants' risk. It is the Department's policy that participants in its housing programs honor their legal, financial, and contractual obligations. Accordingly, uniform standards are established for approvals, disapprovals, or withholding actions on principals in projects, based upon their past performances as well as other relevant information. Respondents such as owners, management agents, master tenants, general contractors, and nursing home operators are subject to review. The information on this form needs to be collected by the Department to evaluate participants' previous performance and compliance with contracts, regulations, and directives.

**SECTION 00 7350
PREVAILING WAGE DETERMINATION**

PREVAILING WAGE DETERMINATION

**1.01 THE PREVAILING WAGE DETERMINATION APPLICABLE TO THIS CONTRACT IS
ATTACHED FOLLOWING THIS PAGE.**

END OF SECTION

Superseded General Decision Number: PA20240105

State: Pennsylvania

Construction Type: Building

County: Westmoreland County in Pennsylvania.

BUILDING CONSTRUCTION PROJECTS (does not include single family homes or apartments up to and including 4 stories).

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(1).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:	. Executive Order 14026 generally applies to the contract. . The contractor must pay all covered workers at least \$17.75 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2025.
If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:	. Executive Order 13658 generally applies to the contract. . The contractor must pay all covered workers at least \$13.30 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2025.

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at <http://www.dol.gov/whd/govcontracts>.

Modification Number	Publication Date
0	01/03/2025
1	01/10/2025

2	01/24/2025
3	02/07/2025
4	03/07/2025
5	03/28/2025
6	07/18/2025

ASBE0002-005 08/01/2024

Rates	Fringes
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ASBESTOS WORKER/HEAT & FROST
INSULATOR

MECHANICAL- Duct, Pipe & Mechanical System Insulation and Industrial Work (Including Duct and Pipe).....	\$ 46.50	29.43
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BOIL0154-007 01/01/2025

Rates	Fringes
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BOILERMAKER.....	\$ 48.28	33.17
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BRPA0009-011 12/01/2022

Rates	Fringes
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TILE FINISHER.....	\$ 28.76	17.16
TILE SETTER.....	\$ 35.64	21.63

BRPA0009-051 12/01/2022

Rates	Fringes
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BRICKLAYER (Including Pointing, Caulking, Cleaning and Brick Refractory Work).....	\$ 36.55	24.46
MASON - STONE.....	\$ 36.55	24.46

Additional \$0.75 to the base wage for Brick Refractory work

CARP0142-013 06/01/2023

Rates	Fringes
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CARPENTER (Including Acoustical Ceiling Installation, Drywall Hanging, Metal Stud Installation, Floor Laying-Hardwood, Carpet and Vinyl; Form Work, and Scaffold Building).....	\$ 38.92	20.06
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CARP0274-003 01/01/2025

Rates	Fringes
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PILEDRIVERMAN.....	\$ 41.88	22.67
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CARP0443-004 06/01/2024

Rates	Fringes
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MILLWRIGHT.....\$ 43.00 23.44

ELEC0005-018 12/27/2024

Rates Fringes

ELECTRICIAN (Alarm
Installation, Installation of
Sound and Communication
System and Low Voltage
Wiring, HVAC/Temperature
Controls Installation Only).....\$ 50.86 31.78

* ENGI0066-040 06/01/2024

Rates Fringes

POWER EQUIPMENT OPERATOR
Backhoe/Excavator/Trackhoe,
Bobcat/Skid Steer/Skid
Loader, Bulldozer,
Compactor, Crane*, Drill
Rig Caissons, Drill,
Gradall, Grader/Blade, Man
Lift/Outside Elevator,
Mechanic, Paver (Asphalt,
Aggregate, and Concrete),
Scraper, Forklift (Lull)....\$ 41.69 24.05
Broom/Sweeper,
Compressor, Concrete Pump,
Highlift, Hoist, Pump,
Roller, Tugboat, Forklift
(ridden or self-propelled)..\$ 35.62 24.05
Loader.....\$ 41.69 24.05
Oiler.....\$ 32.83 24.05

*Add to Crane rate:

Booms 101-150 jibs- Add \$.75
Booms 151-200 jibs- Add \$1.50
Booms 201-251 jibs- Add \$2.25

IRON0003-025 06/01/2023

Rates Fringes

IRONWORKER (Ornamental,
Reinforcing, Rigger and
Structural; Metal Buildings:
Metal Siding/Wall Panels
Installation).....\$ 38.89 34.54

LAB00125-006 06/01/2022

Rates Fringes

LABORER
Mason Tender -
Cement/Concrete.....\$ 30.24 12.05

LAB00373-001 01/01/2025

Rates Fringes

LABORER (Asbestos Abatement (Removal from Floors, Walls, and Ceilings)).....	\$ 27.47	19.89

LAB01451-001 01/01/2024		
	Rates	Fringes
LABORER		
Mason Tender- Brick.....	\$ 29.56	17.05
Common or General.....	\$ 26.31	17.05

PAIN0057-033 06/01/2023		
	Rates	Fringes
PAINTER (Brush, Roller, and Spray, excluding work on Industrial sites).....	\$ 30.56	23.72
PAINTER (Drywall Finishing/Taping).....	\$ 32.39	23.26

PAIN0057-034 06/01/2023		
	Rates	Fringes
PAINTER (INDUSTRIAL: Brush and Roller Only).....	\$ 36.01	23.72
PAINTER (INDUSTRIAL: Spray and Sandblaster Only).....	\$ 36.01	23.72

PAIN0751-006 09/01/2023		
	Rates	Fringes
GLAZIER.....	\$ 35.65	29.73

PLAS0526-015 06/01/2021		
	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER...	\$ 31.77	21.89

PLAS0526-026 06/01/2021		
	Rates	Fringes
PLASTERER.....	\$ 30.69	18.99

PLUM0354-010 06/01/2024		
	Rates	Fringes
PIPEFITTER (Industrial).....	\$ 47.75	26.55

PLUM0354-018 06/01/2024		
	Rates	Fringes
PLUMBER.....	\$ 40.02	26.55

PLUM0354-019 06/01/2024		
	Rates	Fringes

PIPEFITTER (Includes HVAC
Pipe Installation, Excludes
Work on Industrial Sites).....\$ 40.02 26.55

* ROOF0037-005 06/01/2025

	Rates	Fringes
ROOFER (Excludes Metal Roof Installation and Waterproofing).....	\$ 39.91	20.76

SHEE0012-011 07/01/2022

	Rates	Fringes
SHEET METAL WORKER (Includes HVAC Duct and Metal Roof Installation).....	\$ 39.50	30.79

* UAVG-PA-0032 01/01/2025

	Rates	Fringes
SPRINKLER FITTER (Fire Sprinklers).....	\$ 45.15	27.08

SUPA2011-063 08/20/2014

	Rates	Fringes
LABORER: Asphalt Raker.....	\$ 20.92	9.09
LABORER: Landscape.....	\$ 18.10	0.00
LABORER: Luteman.....	\$ 21.13	8.23
ROOFER: Waterproofing Only.....	\$ 23.13	2.51
TRUCK DRIVER: Dump Truck.....	\$ 23.36	7.60

WELDERS - Receive rate prescribed for craft performing
operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at <https://www.dol.gov/agencies/whd/government-contracts>.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (iii)).

The body of each wage determination lists the classifications and wage rates that have been found to be prevailing for the type(s) of construction and geographic area covered by the wage determination. The classifications are listed in alphabetical order under rate identifiers indicating whether the particular rate is a union rate (current union negotiated rate), a survey rate, a weighted union average rate, a state adopted rate, or a supplemental classification rate.

Union Rate Identifiers

A four-letter identifier beginning with characters other than ""SU"", ""UAVG"", ?SA?, or ?SC? denotes that a union rate was prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2024. PLUM is an identifier of the union whose collectively bargained rate prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2024 in the example, is the effective date of the most current negotiated rate.

Union prevailing wage rates are updated to reflect all changes over time that are reported to WHD in the rates in the collective bargaining agreement (CBA) governing the classification.

Union Average Rate Identifiers

The UAVG identifier indicates that no single rate prevailed for those classifications, but that 100% of the data reported for the classifications reflected union rates. EXAMPLE: UAVG-OH-0010 01/01/2024. UAVG indicates that the rate is a weighted union average rate. OH indicates the State of Ohio. The next number, 0010 in the example, is an internal number used in producing the wage determination. The date, 01/01/2024 in the example, indicates the date the wage determination was updated to reflect the most current union average rate.

A UAVG rate will be updated once a year, usually in January, to reflect a weighted average of the current rates in the collective bargaining agreements on which the rate is based.

Survey Rate Identifiers

The ""SU"" identifier indicates that either a single non-union rate prevailed (as defined in 29 CFR 1.2) for this classification in the survey or that the rate was derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As a weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SUFL2022-007 6/27/2024. SU indicates the rate is a single non-union prevailing rate or a weighted average of survey data for that

classification. FL indicates the State of Florida. 2022 is the year of the survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 6/27/2024 in the example, indicates the survey completion date for the classifications and rates under that identifier.

?SU? wage rates typically remain in effect until a new survey is conducted. However, the Wage and Hour Division (WHD) has the discretion to update such rates under 29 CFR 1.6(c)(1).

State Adopted Rate Identifiers

The ""SA"" identifier indicates that the classifications and prevailing wage rates set by a state (or local) government were adopted under 29 C.F.R 1.3(g)-(h). Example: SAME2023-007 01/03/2024. SA reflects that the rates are state adopted. ME refers to the State of Maine. 2023 is the year during which the state completed the survey on which the listed classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 01/03/2024 in the example, reflects the date on which the classifications and rates under the ?SA? identifier took effect under state law in the state from which the rates were adopted.

WAGE DETERMINATION APPEALS PROCESS

1) Has there been an initial decision in the matter? This can be:

- a) a survey underlying a wage determination
- b) an existing published wage determination
- c) an initial WHD letter setting forth a position on a wage determination matter
- d) an initial conformance (additional classification and rate) determination

On survey related matters, initial contact, including requests for summaries of surveys, should be directed to the WHD Branch of Wage Surveys. Requests can be submitted via email to davisbaconinfo@dol.gov or by mail to:

Branch of Wage Surveys
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

Regarding any other wage determination matter such as conformance decisions, requests for initial decisions should be directed to the WHD Branch of Construction Wage Determinations. Requests can be submitted via email to BCWD-Office@dol.gov or by mail to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2) If an initial decision has been issued, then any interested party (those affected by the action) that disagrees with the

decision can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Requests for review and reconsideration can be submitted via email to dba.reconsideration@dol.gov or by mail to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210.

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END OF GENERAL DECISION"

**SECTION 01 0220
LIQUIDATED DAMAGES**

PART ONE-GENERAL

1.01 RELATED DOCUMENTS

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

1.02 SUMMARY

- A. The Westmoreland County Housing Authority will suffer financial loss if the Contractor fails to meet the dates set for completion of the scope of work as specified in Section 01 1000 - Summary.
- B. Liquidated damages shall be as follows:
 - 1. As liquidated damages, and not as a penalty, each Prime Contractor shall be liable for and shall pay the Westmoreland County Housing Authority the sum of \$250.00 for each calendar day of failure to complete the work required as part of that Prime Contract.
- C. At commencement of the Project, the Westmoreland County Housing Authority and Prime Contractors shall agree upon the sequence of the completion dates and the duration of time for the Prime Contractors to complete the work of each Contract. The General Contractor shall monitor the work of its sub-contractors regardless of tier. If the work is not completed on time, the Westmoreland County Housing Authority shall determine the number of days of delay for which the Contractor is responsible, and liquidated damages shall be assigned on this basis.
- D. "Conditions beyond the Contractor's control" are interpreted to include strikes, floods, unusual weather conditions not normally prevailing in the particular season, governmental priority restrictions on materials and any other causes which can be proved as being beyond the control of the Prime Contractor. Extension of time beyond the stipulated date shall be agreed to in writing. If the Westmoreland County Housing Authority contemplates causing delay, the Westmoreland County Housing Authority will notify the Contractor, and will appropriately extend the contract completion date(s). The Contractor shall likewise, if they are unable to complete by the date(s) stated, request authority for delay to new completion date(s) under possible assessment of liquidated damages.
- E. Any adjustment to the Contract Sum due to Liquidated Damages for delays shall be issued as a Change Order at the time of Final Completion.

END OF SECTION

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SECTION 01 0700
RFI - REQUEST FOR INTERPRETATION

PART ONE - GENERAL

1.01 RELATED DOCUMENTS

- A. Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections of Division 1 of these Specifications.

1.02 SUMMARY

- A. This Section specifies administrative and procedural requirements governing each Prime Contractor's Requests for Interpretation (RFI).

1.03 REQUESTS FOR INTERPRETATION

- A. Based upon the Westmoreland County Housing Authority's past experience with projects of similar complexity, the Westmoreland County Housing Authority anticipates that the Contractor will need to request interpretation or clarification of the Contract Documents, which is normal. If the Contractor believes that some portion of the Contract Documents require clarification or interpretation by Canzian/Johnston & Associates, LLC, the Contractor may submit a Request for Interpretation to Canzian/Johnston & Associates, LLC for the purpose of requesting an interpretation or clarification of the Drawings or Specifications.
- B. Canzian/Johnston & Associates, LLC will review all Requests for Interpretation to determine whether they are Requests for Interpretation within the meaning of this term as defined herein. If Canzian/Johnston & Associates, LLC determines that the document is NOT a Request for Interpretation, or if the form is not fully completed, it will be returned to the Contractor, un-reviewed as to content, for re-submittal on the proper form and in the proper manner.
- C. Requests for Interpretation shall not constitute a request for change order or notice of a claim. The Contractor's requests or claims for additional time or cost shall be evaluated solely on the information submitted in support of a timely submitted request for change order or claim.
- D. Immediately upon award of the Contract for Construction, the Contractor along with its Subcontractors shall comprehensively review and analyze the Contract Documents for the purpose of determining whether they have questions requiring interpretation or clarification of the Drawings and Specifications.
- E. A Contractor's Request for Interpretation must be submitted by Email to hcanzian@cjaarchitects.com at Canzian/Johnston & Associates, LLC .
 - 1. A Request for Interpretation may only be submitted by the Prime Contractor('s) and shall only be submitted on a fully completed Request for Interpretation Form immediately following this Specification Section.
 - 2. The Contractor shall clearly and concisely set forth the issue for which clarification or interpretation is sought and the reason that a response is required from Canzian/Johnston & Associates, LLC.
 - 3. All Requests for Interpretation must identify the specific drawing number, detail number and/or specification section for which interpretation or clarification is being sought.
 - 4. In the Request for Interpretation, the Contractor shall set forth its interpretation or understanding of the requirement along with its reasons and rationale for its interpretation or understanding of the requirement. The Contractor shall identify the specific drawing number, detail number and specification sections from which it derived its interpretation or understanding.
- F. The Contractor shall submit its Requests for Interpretation to Canzian/Johnston & Associates, LLC as early as possible and in a manner that prioritizes the need for interpretation.

1. Requests for Interpretation must be submitted sufficiently in advance of the Work for which the Request for Interpretation is submitted so as to avoid delay to the Project and allow Canzian/Johnston & Associates, LLC 10 working days to review and respond to such Request for Interpretation. If Canzian/Johnston & Associates, LLC determines that a longer time is necessary to respond to the Request for Interpretation, Canzian/Johnston & Associates, LLC will notify the Contractor of the anticipated response time within five (5) working days of receipt of the Contractor's Request for Interpretation.
 2. If the Contractor submits a Request for Interpretation pertaining to an activity with a duration of ten (10) working days or less until the date the information is necessary to perform the work, or as of the point at which the information is necessary to avoid delay or extra costs, the Contractor shall not be entitled to any time extension or additional costs due to the time it takes Canzian/Johnston & Associates, LLC to respond to the request, provided that Canzian/Johnston & Associates, LLC responds within the ten (10) working days or additional time Canzian/Johnston & Associates, LLC determines as the response date set forth above.
 3. In the event a response by Canzian/Johnston & Associates, LLC is not made in the time set forth in this specification, the Contractor shall immediately within forty-eight (48) hours, notify Canzian/Johnston & Associates, LLC in writing of any responses that are needed to avoid delay or extra costs in connection with the project. The Contractor shall not be entitled to any extension of time or additional costs unless such immediate written notification is made.
- G. If the Contractor has questions that relate to a submittal, including a shop drawing, it shall include such questions on the submittal. The Contractor shall not delay any submittal, including a shop drawing, on the basis of waiting for a response to a Request for Interpretation.
- H. A response from Canzian/Johnston & Associates, LLC will not change any requirement of the Contract Documents. In the event the Contractor believes that a response to a Request for Interpretation will cause a change to the requirements of the Contract Documents, the Contractor shall give written notice to Canzian/Johnston & Associates, LLC within five (5) working days of the date of receipt of a response to a Request for Interpretation that the Contractor believes a Change Order for additional time or cost is appropriate and shall, thereafter, in all ways comply with the requirements for a Change Order and/or Notice of Claim. Failure to give such timely written notice shall waive the Contractor's right to seek additional time or cost. The Contractor's requests or claims for additional time or cost shall be evaluated solely on the information submitted in support of its request or claim consistent with the Contract Documents.
- I. The Contractor shall not use Requests for Interpretation for direction in the means, methods, scheduling, sequences or safety procedures in connection with its work, which are solely the Contractor's responsibility. Canzian/Johnston & Associates, LLC's response to a Request for Interpretation does not relieve the Contractor of its sole responsibility for means, methods, scheduling, sequences, techniques or safety procedures, which are solely the Contractor's responsibility.

CANZIAN / JOHNSTON & ASSOCIATES LLC

361 Main Street, New Kensington, PA 15068

(Phone) 724-339-0511 (Fax) 724-339-1492

REQUEST FOR INTERPRETATION

RFI NO. 2335-_____

CJA RFI# [_____]

DISCIPLINE/TRADE: [_____]

TROUTMAN BUILDING RE-ROOFING AND MASONRY REPAIRS

WESTMORELAND COUNTY HOUSING AUTHORITY

REQUEST DATE: _____

FROM: _____

COMPANY: _____

PHONE: _____

FAX: _____

SUBJECT:_____ **DRAWING NO.:**

SPECIFICATION SECTION: _____

QUERY:

ARCHITECT RESPONSE:

AUTHORIZED SIGNATURE_____ **DATE**

ENGINEER RESPONSE:

AUTHORIZED SIGNATURE_____ **COMPANY**_____ **DATE**

END OF SECTION

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**SECTION 01 1000
SUMMARY**

PART 1 GENERAL

1.01 PROJECT

- A. Project Name: Troutman Building Re-Roofing and Masonry Repairs
- B. Owner's Name: Westmoreland County Housing Authority.
- C. Architect's Name: Canzian/Johnston & Associates LLC.
- D. The Project consists of the re-roofing of the building and masonry repairs of the building performed by separate Prime Contractors for the Westmoreland County Housing Authority at The Troutman Building.

1.02 CONTRACTING PLAN

- A. The overall Scope of Work for this Project shall be performed under the Prime Contract format listed below. Westmoreland County Housing Authority reserve the right to alter the number of Contracts and Scopes of Work at any given time.
 - 1. CONTRACT: GENERAL ROOFING CONSTRUCTION (RC)
 - 2. CONTRACT: GENERAL MASONRY REPAIR CONSTRUCTION (GC)
- B. Contract Type: Multiple prime contracts each based on a Stipulated Price as described.
- C. The work of each separate prime contract is identified briefly in this section, following sections .

1.03 BASE BID DESCRIPTION

- A. Scope of demolition and removal work is indicated throughout the Project Manual and drawings.
- B. Scope of alterations work is indicated on drawings.
- C. HVAC: Alter existing and add new construction.
 - 1. Roofing Contractor shall lift two (2) chillers and one (1) air handling unit from the rooftop.
- D. Electrical Power and Lighting: Alter existing system and add new construction, keeping existing in operation.

1.04 WORK BY OWNER

- A. Westmoreland County Housing Authority will disconnect and make final connections for two (2) chillers and one (1) air handling unit on the roof.

1.05 OWNER OCCUPANCY

- A. Westmoreland County Housing Authority intends to continue to occupy the existing buildings during the entire construction period.
- B. Cooperate with Westmoreland County Housing Authority to minimize conflict and to facilitate Westmoreland County Housing Authority's operations.
- C. Schedule the Work to accommodate Westmoreland County Housing Authority occupancy.

1.06 CONTRACTOR USE OF SITE AND PREMISES

- A. Construction Operations: Limited to areas noted on Drawings as areas receiving Work.
- B. Arrange use of site and premises to allow:
 - 1. Westmoreland County Housing Authority occupancy.
 - 2. Work by Others.
 - 3. Work by Westmoreland County Housing Authority.
 - 4. Use of site and premises by the public.
 - 5. Do not interfere with the work of other Contractors.
- C. Provide access to and from site as required by law and by Westmoreland County Housing Authority:

1. Emergency Building Exits During Construction: Keep all exits required by code open during construction period; provide temporary exit signs if exit routes are temporarily altered.
 2. Keep fire hydrants accessible at all times. Place no materials or obstructions within twenty (20) feet of any such hydrant, or at greater distance which may be required by law or ordinance.
 3. Do not obstruct roadways, sidewalks, or other public ways without permit.
 4. Do not obstruct utility connections.
 5. Access the site for delivery of construction material or equipment only from locations designated by Westmoreland County Housing Authority.
- D. Existing building spaces may not be used for storage.
- E. Work in or Adjacent to Occupied Areas:
1. All exit ways in occupied portions of the building shall remain operational.
 2. Efforts shall be made to use products that have low vapor emitting properties and to utilize work procedures designed to control emissions.
 3. No construction materials shall be stored in corridors and stairs at any time.
 4. Do not perform any work during the school day which could cause the fire alarm to be inadvertently activated.
 5. Contractors shall immediately clean and remove construction debris from any work area under their responsibility in an occupied area once the work is completed or halted for a significant period of time.
- F. Time Restrictions:
1. Work hours at the project site for the primary shift shall be restricted to the hours of 8:00 AM to 4:00 PM on a daily basis during a normal work week (Monday through Friday).
 2. Work that is required to be performed during hours other than specified work hours (including weekend work) shall be scheduled and accepted by the Owner. Contractor shall anticipate and include as part of the cost of completing the work.
- G. Utility Outages and Shutdown:
1. Limit disruption of utility services to the building. Do not disrupt utilities without 14 days notice to the Owner and authorities having jurisdiction.
 2. Do not disrupt or shut down life safety systems, including but not limited to fire sprinklers and fire alarm system, without 14 days notice to Westmoreland County Housing Authority and authorities having jurisdiction.
 3. Prevent accidental disruption of utility services to other facilities.
 4. Interruptions, outages and shutdowns shall necessitate evening or weekend work which shall be anticipated by Contractor and included as part of the Contract Sum.
 5. Tenants shall be provided a minimum of 72 hours notice of disruptions.
- H. No advertising will be permitted on any part of the building, scaffolding, fences, materials, obstructions, trailers, or site except by permission of Westmoreland County Housing Authority.

1.07 WORK SEQUENCE

- A. All work shall commence upon the Notice to Proceed and shall be fully complete not later than 140 consecutive calendar days later..
- B. Work shall be suspended with the unsuitability of weather, the onset of winter weather, with work beginning again in Spring.
1. In case of suspension, a proper Extension of Time will be allowed for this excusable, non-compensatory delay, and the Contractor may not submit any claim for any expense or damages resulting from the suspension.
 2. When Westmoreland County Housing Authority directs resumption of the Work, the Contractor shall resume full operations within fourteen (14) calendar days after the date of Westmoreland County Housing Authority's letter terminating the suspension of the Work.
 3. Westmoreland County Housing Authority is not liable for any damages or anticipated profits on account of the Work being suspended.

- C. Coordinate construction schedule and operations with Westmoreland County Housing Authority.
- D. Dates are subject to adjustment pending Westmoreland County Housing Authority Board.
- E. Contractor shall verify extent of work prior to issuing bid. Prior to bid, contractor shall document pre-bid investigation. Upon request, contractor shall submit pre-bid investigation report to Westmoreland County Housing Authority for review.

1.08 ALL CONTRACTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division I Specification Sections, apply to this Section.
- B. Summary by references: The work of this Contract can be summarized by reference to the Agreement, General Conditions, Supplementary Conditions, Specification Sections as listed in the Table of Contents of the Project Manual, Drawings as listed in the List of Drawings, Addenda and Modifications to the Contract Documents issued subsequent to the initial printing of this Project Manual, and including but not necessarily limited to printed matter referenced by any of these. It is recognized that work of Contract is also unavoidably affected or influenced by governing regulations, natural phenomena including weather conditions, and other forces outside the Contract Documents.
- C. The Contract Documents are a diagrammatic, two dimensional representation of the work to be performed and may not delineate or describe every detail and feature of the work. Any and all work not shown or described by the Contract Documents, but necessary for the execution of same, shall be the responsibility of the Contractor.
- D. Each Contractor / Subcontractor shall furnish and install his own equipment in place, providing all necessary setting materials and accessories, including concrete, structural steel supports, hangers, bolts, anchors, and other fastening devices, securely erected in place unless otherwise indicated.
- E. Each Contractor shall provide labor, material, plant, tools, equipment and supervision related to or necessarily involved with the performance of Work, as indicated on all the Drawings and Specifications and as described.
- F. Unless otherwise noted, all provisions of the Divisions and Sections listed below apply to all contracts. Specific items of work listed under individual contract descriptions constitute exceptions.
 - 1. Division 00 - Procurement and Contracting Requirements
 - a. All Sections.
 - 2. Division 01 - General Requirements
 - a. All Sections.
- G. Section 02 4100 - Demolition (as it relates to each Contractor's specific scope of work).
 - 1. Each Prime Contractor shall be responsible for cutting and patching work specifically related to the work of its contract unless otherwise indicated. Contractors requiring partial removal of equipments, partitions, ceilings and other systems that will later require patching must exercise caution while executing such removals to avoid unnecessary, excessive patching work.

1.09 CONTRACT: GENERAL ROOFING CONSTRUCTION

- A. Provide all Work except Work specifically assigned to other Contractors within the Construction Documents. Contractor shall provide labor, material, plant, tools, equipment and supervision related to or necessarily involved with the performance of Work, as indicated on all the Drawings and Specifications and as described but not limited to the following:
 - 1. Division 07 - Thermal and Moisture Protection.
 - a. Section 07 5300 - Elastomeric Membrane Roofing.
 - b. Section 07 7123 - Manufactured Gutters and Downspouts.
 - c. Section 07 7200 - Roof Accessories.

- d. Section 07 9200 - Joint Sealants: Each Prime Contractor shall be responsible for joint sealants specifically related to the work of its contract unless otherwise indicated.
- 2. Division 08 - Openings.
 - a. All Sections.
- 3. Division 09 - Finishes.
 - a. Section 09 9113 - Exterior Painting as indicated on Drawings.
 - b. Section 09 9123 - Interior Painting.
- B. Provide all Work except Work specifically assigned to other contractors in this Section.
- C. Drawings: All drawing sheets.

1.10 CONTRACT: GENERAL MASONRY REPAIR CONSTRUCTION

- A. Provide all Work except Work specifically assigned to other Contractors within the Construction Documents. Contractor shall provide labor, material, plant, tools, equipment and supervision related to or necessarily involved with the performance of Work, as indicated on all the Drawings and Specifications and as described but not limited to the following:
 - 1. Division 04 - Masonry.
 - a. All Sections.
 - 2. Division 05 - Metals.
 - a. All Sections.
 - 3. Division 07 - Thermal and Moisture Protection.
 - a. Section 07 4213 - Metal Wall Panels.
 - b. Section 07 9200 - Joint Sealants: Each Prime Contractor shall be responsible for joint sealants specifically related to the work of its contract unless otherwise indicated.
 - 4. Division 09 - Finishes.
 - a. Section 09 9113 - Exterior Painting as indicated on Drawings.
 - b. Section 09 9723 - Concrete and Masonry Coatings.
 - 5. Division 26 - Electrical.
 - a. All Sections.
- B. Drawings: All drawing sheets.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

**SECTION 01 2000
PRICE AND PAYMENT PROCEDURES**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Procedures for preparation and submittal of applications for progress payments.

1.02 RELATED REQUIREMENTS

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

1.03 SCHEDULE OF VALUES

- A. Form to be used: form HUD-51000 (most recent revision).
- B. Forms filled out by hand will not be accepted.
- C. Within 24 hours after the bid opening, the apparent low bidder shall submit an initial proposed schedule of values to Canzian/Johnston & Associates, LLC.
 - 1. Use required means to assure arithmetical accuracy of the sums described.
 - 2. Meet with Canzian/Johnston & Associates, LLC and determine additional data, if any, required to be submitted.
 - 3. When so required by Canzian/Johnston & Associates, LLC, provide copies of the subcontractors or other data acceptable to Canzian/Johnston & Associates, LLC, substantiating the sums described.
 - 4. Secure Canzian/Johnston & Associates, LLC's approval of the schedule of values prior to the execution of the Contract Documents.

1.04 APPLICATIONS FOR PROGRESS PAYMENTS

- A. Payment Period: The period covered by each application for payment shall be one calendar month ending on the last day of the month.
 - 1. Provided that an application for payment is received by the Architect on or before the 23rd day of each month, the Owner shall make payment no later than the 30th of the following month. If an application for payment is received by the Architect after the 23rd day of the month, payment shall be made by the Owner no later than forty-five (45) days after the Architect receives the application for payment.
 - 2. Payment Certification shall be attached to each Payment Request.
- B. Form to be used: HUD-51001 - Periodic Estimate for Partial Payment.
- C. Each application for payment shall be consistent with previous application and payments as certified by Architect and paid for by Owner.
- D. The initial application for payment, the application for payment at time of Substantial Completion, and the final application for payment involve additional requirements.
- E. Complete every entry on application for payment form, including notarization and execution by person authorized to sign legal documents on behalf of the Contractor. Incomplete applications will be returned without action.
- F. Forms filled out by hand will not be accepted.
- G. Execute certification by signature of authorized officer.
- H. Use data from approved Schedule of Values. Provide dollar value in each column for each line item for portion of work performed and for stored products.
- I. List each authorized Change Order and Construction Change Directive as a separate line item, listing Change Order number and dollar amount as for an original item of Work.
- J. Submit four (4) copies of each Application for Payment with a transmittal form listing attachment, and recording appropriate information related to application in a manner acceptable to the Design Professional.

- K. Retainage: Until Fifty Percent (50%) completion, the Westmoreland County Housing Authority will pay Ninety percent (90%) of the amount due the Contractor on account of progress payments. After Fifty Percent (50%) completion, the Westmoreland County Housing Authority shall retain Five percent (5%) of the value of material properly stored and of work-in-place until substantial completion pending the approval of Canzian/Johnston & Associates LLC.
Following substantial completion the Westmoreland County Housing Authority shall retain one and one-half (1½) times the value of uncompleted and defective Work as determined by the Westmoreland County Housing Authority's Representative, Project Coordinator, and Canzian/Johnston & Associates LLC.
- L. When Canzian/Johnston & Associates, LLC requires substantiating information, submit data justifying dollar amounts in question. Provide one copy of data with cover letter for each copy of submittal. Show application number and date, and line item by number and description.

1.05 APPLICATION FOR FINAL PAYMENT

- A. Prepare Application for Final Payment as specified for progress payments, identifying total adjusted Contract Sum, previous payments, and sum remaining due.
- B. Application for Final Payment will not be considered until the following have been accomplished:
 - 1. All closeout procedures specified in Section 01 7000.
 - 2. Submit the final Application for Payment in accordance with procedures and requirements stated in the Conditions of the Contract.

END OF SECTION

**SECTION 01 2300
ALTERNATIVES**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Description of Alternates.
- B. Procedures for pricing alternates:
 - 1. Provide alternate bids to be subtracted from the amount of the Base Bid if the corresponding change in scope is accepted by the Westmoreland County Housing Authority.
 - 2. Include within the alternate bid prices all costs; including but not limited to providing all materials, labor, installation and fees.
 - 3. Show the proposed alternate amounts opposite their proper description on the Bid Form.

1.02 RELATED REQUIREMENTS

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

1.03 ACCEPTANCE OF ALTERNATES

- A. Alternates quoted on Bid Forms will be reviewed and accepted or rejected at Westmoreland County Housing Authority's option. Accepted Alternates will be identified in the Owner-Contractor Agreement.
- B. Coordinate related work and modify surrounding work to integrate the Work and reinstalling of each alternate at no additional cost.

1.04 SCHEDULE OF ALTERNATES

- A. General Masonry Repair Contract - Alternate No. 1 (Delete) Provide an amount to be deducted from the Base Bid as indicated on/within the Contract Documents as part of Alternate No. 1 - Repair Work to All Granite and Limestone. Deleted work is indicated on the Drawings and described here; no work shall be performed at existing granite and limestone.
- B. General Masonry Repair Contract - Alternate No. 2 (Delete) Provide an amount to be deducted from the Base Bid as indicated on/within the Contract Documents as part of Alternate No. 2 - Awning Soffits and Lighting. Deleted work is indicated on the Drawings and described here; new soffits for both existing awnings shall not be provided; new lighting at both awnings and all supporting electrical work shall not be provided.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

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**SECTION 01 3000
ADMINISTRATIVE REQUIREMENTS**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Electronic document submittal service.
- B. Preconstruction meeting.
- C. Site mobilization meeting.
- D. Progress meetings.
- E. Contractor's daily reports.
- F. Progress photographs.
- G. Number of copies of submittals.
- H. Submittal procedures.

1.02 RELATED REQUIREMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division I Specification Sections, apply to this Section.
- B. Section 01 3216 - Construction Schedule: Form, content, and administration of schedules.
- C. Section 01 7800 - Closeout Submittals: Project record document; operation and maintenance date; warranties and bonds.

1.03 QUALITY ASSURANCE

- A. For those persons designated by the Contractor to attend and participate in project meetings, provide required authority to commit the Contractor to solutions agreed upon in the project meetings.
 - 1. The Contractor's relations with Sub-contractors regardless of tier and materials suppliers and discussions relative thereto, are the Contractor's responsibility and normally are not part of Progress Meetings.

1.04 PROJECT COORDINATION

- A. Project Coordinator: WCHA's designated representative.
- B. Prime Contractor shall:
 - 1. Coordinate the work of its own employees and Subcontractors regardless of tier.
 - 2. Expedite Work to assure compliance with schedules.
 - 3. Coordinate work by Westmoreland County Housing Authority.
 - 4. Comply with orders and instructions of the Project Coordinator.
 - 5. Verify that permits for inspections and for temporary facilities have been obtained.
- C. Cooperate with the Project Coordinator in allocation of mobilization areas of site; for field offices and sheds, for all parties access, traffic, and parking facilities.
- D. During construction, coordinate use of site and facilities through the Project Coordinator.
- E. Comply with Project Coordinator's procedures for intra-project communications; submittals, reports and records, schedules, coordination drawings, and recommendations; and resolution of ambiguities and conflicts.
- F. Comply with instructions of the Project Coordinator for use of temporary utilities.
- G. Coordinate field engineering and layout work under instructions of the Project Coordinator.
- H. Coordinate inspection and testing under instructions of the Project Coordinator.
 - 1. Inspect work to assure that it is performed in accord with requirements of Contract Documents.
 - 2. Coordinate testing laboratory services:
 - a. Verify that required laboratory personnel are present.

- b. Verify that tests are made in accordance with specified standards.
 - c. Review test reports for compliance with specified criteria.
 - d. Recommend and administer any required retesting.
- I. Coordinate periodic cleaning under instructions of the Project Coordinator.
- J. Make the following types of submittals to Canzian/Johnston & Associates, LLC:
 - 1. Requests for information.
 - 2. Requests for substitution.
 - 3. Shop drawings, product data, and samples.
 - 4. Test and inspection reports.
 - 5. Manufacturer's instructions and field reports.
 - 6. Applications for payment and change order requests.
 - 7. Progress schedules.
 - 8. Coordination drawings.
 - 9. Closeout submittals.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 ELECTRONIC DOCUMENT SUBMITTAL SERVICE

- A. All documents transmitted for purposes of administration of the contract are to be in electronic (PDF) format and transmitted via email.
 - 1. Besides submittals for review, information, and closeout, this procedure applies to requests for information (RFIs), progress documentation, contract modification documents (e.g. supplementary instructions, change proposals, change orders), "pencil copies" of applications for payment, applications for payment, field reports and meeting minutes, Contractor's correction punchlist, and any other document any participant wishes to make part of the project record.
 - 2. It is Contractor's responsibility to submit documents in allowable format. Subcontractors and suppliers are not to submit directly; all documents shall originate with the Prime Contractors only.
 - 3. Paper document transmittals will not be reviewed.
 - 4. All other specified submittal and document transmission procedures apply, electronic document requirements do apply to samples or color selection charts.
 - a. Sample and color selection charts shall be digitally photographed (or equivalent) for submission electronically.
 - b. Samples and color selection charts shall also be submitted, concurrent with the electronic submission, as physical and hard copies utilizing the same submittal cover sheet information and shall be considered part of the electronic submission.

3.02 PRECONSTRUCTION MEETING

- A. Westmoreland County Housing Authority will schedule a meeting after Notice of Award.
- B. Attendance Required:
 - 1. Westmoreland County Housing Authority.
 - 2. Canzian/Johnston & Associates, LLC.
 - 3. Prime Contractors.
 - 4. Major Sub-Contractors as requested by Westmoreland County Housing Authority.
- C. Agenda:
 - 1. Execution of Westmoreland County Housing Authority-Contractor Agreement.
 - 2. Submission of executed bonds and insurance certificates.
 - 3. Distribution of Contract Documents.
 - 4. Submission of list of Subcontractors, list of Products, schedule of values, and progress schedule.
 - 5. Submission of initial Submittal schedule.

6. Designation of personnel representing the parties to Contract and .
 7. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, Change Orders, and Contract closeout procedures.
 8. Scheduling.
- D. Record minutes and distribute copies within five (5) days after meeting to participants, with one copy to Canzian/Johnston & Associates, LLC, Westmoreland County Housing Authority, participants, and those affected by decisions made.
1. Minutes shall be recorded and distributed by Project Coordinator.

3.03 SITE MOBILIZATION MEETING

- A. Westmoreland County Housing Authority will schedule meeting at the Project site prior to Contractor occupancy.
1. Site mobilization meeting may occur at the same time as the Preconstruction Meeting (above). Should this occur, all parties shall be notified of this intent.
- B. Attendance Required:
1. Prime Contractors.
 2. Westmoreland County Housing Authority.
 3. Contractor's Superintendent.
- C. Agenda:
1. Use of premises by Westmoreland County Housing Authority.
 2. Westmoreland County Housing Authority's requirements and occupancy prior to completion.
 3. Temporary utilities provided by Westmoreland County Housing Authority.
 4. Security and housekeeping procedures.
 5. Schedules.
 6. Application for payment procedures.
 7. Procedures for testing.
 8. Procedures for maintaining record documents.
 9. Inspection and acceptance of equipment put into service during construction period.
- D. Record minutes and distribute copies within five (5) days after meeting to participants, with copies to Canzian/Johnston & Associates, LLC, Westmoreland County Housing Authority, participants, and those affected by decisions made.
1. Minutes shall be recorded and distributed by Project Coordinator .
 2. Should the Site Mobilization Meeting occur with the Preconstruction Meeting, minutes may be combined at the discretion of the recorder of minutes.

3.04 PROGRESS MEETINGS

- A. Schedule and administer meetings throughout progress of the Work at maximum two week intervals.
1. Project Coordinator shall determine the frequency, dates and times of Progress Meetings in cooperation with Westmoreland County Housing Authority; meetings may occur as often as deemed necessary by Westmoreland County Housing Authority.
- B. Attendance Required:
1. Contractors.
 2. Westmoreland County Housing Authority.
 3. Contractor's Superintendent.
 4. Contractor shall assign the same person or persons to represent the Contractor at Progress Meetings throughout the duration of the work.
 5. Sub-contractors, materials suppliers, and other like entities SHALL NOT attend Progress Meetings unless specifically requested by Canzian/Johnston & Associates, LLC, Project Coordinator, or Westmoreland County Housing Authority.
- C. Progress Meeting Report: Each Contractor shall prepare a completed Progress Meeting Report, included at the end of this Section, for each such meeting.

1. Each Progress Meeting Report shall be submitted to the Project Coordinator at the conclusion of the Progress Meeting.
- D. Agenda:
1. Review minutes of previous meetings.
 2. Review of Work progress.
 3. Field observations, problems, and decisions.
 4. Identification of problems that impede, or will impede, planned progress.
 5. Review of submittals schedule and status of submittals.
 6. Review of RFIs log and status of responses.
 7. Maintenance of progress schedule.
 8. Corrective measures to regain projected schedules.
 9. Planned progress during succeeding work period.
 10. Coordination of projected progress.
 11. Maintenance of quality and work standards.
 12. Effect of proposed changes on progress schedule and coordination.
 13. Other business relating to Work.
- E. Record minutes and distribute copies within five (5) days after meeting to participants, with copies to Canzian/Johnston & Associates, LLC, Westmoreland County Housing Authority, and participants, and those affected by decisions made.
1. Minutes shall be recorded and distributed by Project Coordinator.
- F. Revisions to minutes:
1. Unless published minutes are challenged in writing within seven (7) calendar days from the date that they were issued, the published minutes shall be accepted by all parties as properly stating the activities and decisions of the meeting to which they pertain.
 2. Persons challenging published minutes shall reproduce and distribute copies of the challenge to all indicated recipients of the particular set of minutes.
 3. Challenge to minutes shall be settled at the next regularly scheduled meeting.

3.05 CONSTRUCTION PROGRESS SCHEDULE - SEE SECTION 01 3216

3.06 DAILY CONSTRUCTION REPORTS

- A. Include only factual information. Do not include personal remarks or opinions regarding operations and/or personnel.
- B. Prepare a daily construction report recording the following information concerning events at Project site and project progress:
 1. Date.
 2. High and low temperatures, and general weather conditions.
 3. List of subcontractors at Project site.
 4. Approximate count of personnel at Project site.
 5. Meetings and significant decisions.
 6. Stoppages, delays, shortages, and losses. Include comparison between scheduled work activities (in Contractor's most recently updated and published schedule) and actual activities. Explain differences, if any. Note days or periods when no work was in progress and explain the reasons why.
 7. Directives and requests of Authority(s) Having Jurisdiction (AHJ).
 8. Testing and/or inspections performed.
 9. Signature of Contractor's authorized representative.

3.07 PROGRESS PHOTOGRAPHS

- A. Contractors shall submit photographs with each application for payment, taken not more than 3 days prior to submission of application for payment.
- B. Photography Type: Digital; electronic files.
- C. Views:

1. Consult with Project Coordinator and Canzian/Johnston & Associates, LLC for instructions on views required.
 2. Provide factual presentation.
 3. Provide correct exposure and focus, high resolution and sharpness, maximum depth of field, and minimum distortion.
- D. Digital Photographs: 24 bit color, minimum resolution of 1024 by 768, in JPG format; provide files unaltered by photo editing software.
1. Delivery Medium: Via Electronic Document Service as part of "pencil copy".
 2. File Naming: Include project identification, date and time of view, and view identification.
 3. PDF File: Assemble all photos into printable pages in PDF format, with 2 to 3 photos per page, each photo labeled with file name; one PDF file per submittal.

3.08 SUBMITTALS FOR REVIEW

- A. When the following are specified in individual sections, submit them for review:
1. Product data.
 - a. Where contents of submitted literature from manufacturers includes data not pertinent to the submittal, clearly show which portions of the contents are being submitted for review.
 2. Shop drawings.
 - a. Scale and measurements: Make Shop Drawings accurately to a scale sufficiently large to show all pertinent aspects of the item and its method of connection to the Work.
 3. Samples for selection.
 4. Samples for verification.
- B. Submit to Canzian/Johnston & Associates, LLC for review for the limited purpose of checking for conformance with information given and the design concept expressed in the contract documents.
- C. Samples will be reviewed only for aesthetic, color, or finish selection.
1. Submit samples to illustrate functional and aesthetic characteristics of the product, with integral parts and attachment devices. Coordinate sample submittals for interfacing work.
 2. Provide sample or samples identical to the precise article proposed to be provided.
 3. Colors and Patterns: Unless the precise color and pattern is specifically called out in the Contract Documents, and whenever a choice of color or pattern is available in the specified products, submit accurate and complete color and pattern charts to Canzian/Johnston & Associates, LLC for selection.

3.09 SUBMITTALS FOR INFORMATION

- A. When the following are specified in individual sections, submit them for information:
1. Design data.
 - a. Where contents of submitted literature from manufacturers includes data not pertinent to the submittal, clearly show which portions of the contents are being submitted for review.
 2. Certificates.
 3. Test reports.
 4. Inspection reports.
 5. Manufacturer's instructions.
 6. Manufacturer's field reports.
 7. Other types indicated.
- B. Submit for Canzian/Johnston & Associates, LLC's knowledge as contract administrator or for Westmoreland County Housing Authority.

3.10 SUBMITTALS FOR PROJECT CLOSEOUT

- A. Submit Correction Punch List for Substantial Completion.

- B. Submit Final Correction Punch List for Substantial Completion.
- C. When the following are specified in individual sections, submit them at project closeout in compliance with requirements of Section 01 7800 - Closeout Submittals.
 - 1. Project record documents.
 - 2. Operation and maintenance data.
 - 3. Warranties.
 - 4. Bonds.
 - 5. Other types as indicated.
- D. Submit for Westmoreland County Housing Authority's benefit during and after project completion.

3.11 NUMBER OF COPIES OF SUBMITTALS

- A. Electronic Documents: Submit one electronic copy in PDF format; an electronically-marked up file will be returned. Create PDFs at native size and right-side up; illegible files will be rejected.
- B. Samples: Submit the number specified in individual specification sections, or if not stated a minimum of three (3); one of which will be retained by Canzian/Johnston & Associates, LLC.
 - 1. After review, produce duplicates.
 - 2. Retained samples will not be returned to Contractor unless specifically so requested.

3.12 SUBMITTAL SCHEDULE

- A. As the first submittal, but not later than 15 days after Notice to Proceed, submit a complete submittal schedule containing at a minimum the information that follows.
 - 1. Identify submittals to be made listing Submittal Information as follows:
 - a. Specification Section
 - b. Specification Title
 - c. Description and title of each submission required per Section.
 - d. Approximate Date submittal will be forwarded.
 - e. Approximate Date for installation or use of item submitted.
 - f. Relevant Notes.
 - g. Substitution Proposed.
 - h. Proposed Product.
 - 2. The final format of the submittal schedule shall be determined by the individual Contractor.

3.13 SUBMITTAL PROCEDURES

- A. Transmit each submittal with the attached approved form; a digital form shall be provided.
 - 1. Failure to use the accompanying Submittal Cover Sheet shall delay review of the submittals until the properly executed, accompanying submittal cover sheet is received.
 - 2. Substitutions of cover sheets shall not be accepted.
 - 3. Delays caused by an inappropriate or missing Submittal Cover Sheet shall be the responsibility of the Contractor.
- B. Number the transmittal form with the Specification Section for which the submittal is being made. Revise submittals with this original number and a sequential alphabetic suffix.
 - 1. When material is resubmitted for any reason, transmit under a new Submittal Cover Sheet.
- C. Identify Project, Contractor, Subcontractor or supplier; pertinent drawing and detail number, and specification section number, as appropriate on each copy.
- D. Apply Contractor's stamp, signed or initialed certifying that review, approval, verification of Products required, field dimensions, adjacent construction Work, and coordination of information is in accordance with the requirements of the Work and Contract Documents.
- E. Schedule submittals to expedite the Project, and coordinate submission of related items.
 - 1. Make submittals far enough in advance of scheduled dates for installation to provide time required for reviews, for securing necessary approvals, for possible revisions and resubmittals, and for placing orders and securing delivery.

2. Unless noted otherwise, make submittals in groups corresponding to a SINGLE specification section, COMPLETE, containing all associated items to assure that information is available for checking each item when it is received.
 - a. Each individual item submitted as part of a group shall be bound individually into single packets such that each packet contains a single copy of each item submitted.
 - b. Partial submittals, not containing all items indicated within the pertinent Specification Section, shall be rejected as not complying with the provisions of the Contract.
 - c. The Contractor shall be held liable for delays so occasioned.
- F. For each submittal for review, allow 15 days excluding delivery time to and from the Contractor.
- G. Identify variations from Contract Documents and Product or system limitations that may be detrimental to successful performance of the completed Work.
- H. Provide space for Contractor and Canzian/Johnston & Associates, LLC review stamps.
 1. Review by the Architect does not relieve the Contractor from responsibility for errors which may exist in the submitted data.
 2. Review comments of Canzian/Johnston & Associates LLC will be shown within the body of the submittal and/or on the Submittal Cover Sheet. The Contractor may not make and distribute copies without the original signature of the Architect or appropriate representative.
- I. When revised for resubmission, CLEARLY identify all changes made since previous submission.
 1. Make revisions required by Canzian/Johnston & Associates, LLC.
 2. Make only those revisions directed or approved by Canzian/Johnston & Associates, LLC.
- J. Distribute reviewed submittals as appropriate. Instruct parties to promptly report any inability to comply with requirements.
- K. Submittals not requested will not be recognized or processed.
- L. Reimbursement of Canzian/Johnston & Associates, LLC's costs:
 1. In the event substitutions are proposed to Canzian/Johnston & Associates, LLC after the Contract has been awarded or during the course of submittals a substitution is requested by presentation as a submittal, Canzian/Johnston & Associates, LLC shall record all time used by Canzian/Johnston & Associates, LLC and all consultants deemed necessary by Canzian/Johnston & Associates, LLC in the evaluation of each such proposed substitution.
 2. Whether or not Canzian/Johnston & Associates, LLC approves a substitution, the Contractor promptly upon receipt of Canzian/Johnston & Associates, LLC's billing shall reimburse Canzian/Johnston & Associates, LLC at the rate of two and one-half times the direct cost to Canzian/Johnston & Associates, LLC and all consultants for all time spent evaluating the proposed substitution.

PROGRESS MEETING REPORT

CANZIAN/JOHNSTON & ASSOCIATES, LLC

361 MAIN STREET · NEW KENSINGTON · PA 15068

PHONE 724/339-0511 · FAX 724/339-1492

PROJECT NO. 2335

WEATHER:

9.01 TEMP: M___ T___ W___ TH___ F___ CONDITIONS: M___ T___ W___ TH___ F___

WORK COMPLETED:

WORK PROJECTED:

PROBLEMS / DELAYS / DISCUSSION:

SUBMITTED BY: _____

COMPANY: _____

DATE: _____

CANZIAN / JOHNSTON & ASSOCIATES

361 MAIN STREET - NEW KENSINGTON, PA 15068 - (724) 339-0511 - FAX (724) 339-1492

SUBMITTAL COVER SHEET

Submittal No. _____

Project _____
Owner _____
CJA Project No. _____
Contractor _____
Submittal Item _____
Supplier/Mfr. _____
Spec Section No. _____

Distribution	Quantity	Date Sent	Date Received
Subcontractor to Prime Contractor			
Owner to Architect			
Architect to Consultant			
Consultant to Architect			
Architect to Owner			
Prime Contractor to Subcontractor			

Comments:

SUBMITTAL REVIEW

- ☐ No Exception Taken ☐ Not Acceptable
☐ Make Correction Noted ☐ Revise/Resubmit
☐ Subject to Action by Architect's Consultant

Review or other action by the Architect is only for the limited purposes of checking for conformance with the information and design concept expressed in the Contract Documents and is not for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities or for substantiating instructions for installation or performance of equipment or systems designed by the Contractor, all of which remain the responsibility of the Contractor to the extent required by the Contract Documents. Review shall not constitute acceptance of safety precaution or unless otherwise specifically stated by the Architect, of construction means, methods, techniques, sequences or procedures. Review of a specific item shall not indicate acceptance of an assembly of which the item is a component.

By: _____ Date: _____
(ARCHITECT'S REVIEW STAMP)

END OF SECTION

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**SECTION 01 3216
CONSTRUCTION SCHEDULE**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Preliminary schedule.
- B. Construction progress schedule,.

1.02 RELATED SECTIONS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division I Specification Sections, apply to this Section.
- B. Section 01 1000 - SUMMARY: Scope of work.

1.03 SUBMITTALS

- A. Within 10 days after date established in Notice to Proceed, each Contractor shall submit a preliminary schedule defining planned operations for the first 60 days of Work, with a general outline for remainder of Work.
- B. If preliminary schedule requires revision after review, submit revised schedule within 5 days.
- C. Within 10 days after review of preliminary schedule, submit draft of proposed complete schedule for review.
- D. Within 10 days after joint review, submit complete schedule.
- E. Submit updated schedule with each Application for Payment.
- F. Submit the number of opaque reproductions that Contractor requires, plus two copies that will be retained by Canzian/Johnston & Associates, LLC.
- G. Submit under submittal transmittal letter form specified in Section 01 3000.

1.04 QUALITY ASSURANCE

- A. Coordination of the work between Contractors shall include, but is not limited to, exchange of information about the extent of Work, duration of Work, identification of Work required by others to facilitate the Work and the required start, duration and finish times for the Work activities.
 - 1. Where work activities rely upon the work of the other Prime Contractor, the work of the other Prime Contractor shall be reflected on the construction schedule.
 - 2. Finalized construction schedules of each Prime Contractor shall be initialed and dated by the other Prime Contractor reflecting coordinated and accepted dates.
- B. Reliance upon the approved schedule:
 - 1. The construction schedule as approved by Project Coordinator and Canzian/Johnston & Associates, LLC will be an integral part of the Contract and will establish interim completion dates for the various activities under the Contract.
 - 2. Should any activity not be completed within 15 days after the stated scheduled date, the Westmoreland County Housing Authority shall have the right to require the Contractor to expedite completion of the activity by whatever means the Westmoreland County Housing Authority deems appropriate and necessary, without additional compensation to the Contractor.
 - 3. Should any activity be 30 days or more behind schedule, the Westmoreland County Housing Authority shall have the right to perform the activity or have the activity performed by whatever method the Westmoreland County Housing Authority deems appropriate.
 - a. Delays and costs incurred by these activities shall be deemed the responsibility of the Contractor to have fallen behind schedule and all costs incurred shall be the burden of the same.
 - 4. Costs, including overhead profit, incurred by the Westmoreland County Housing Authority, Project Coordinator and Canzian/Johnston & Associates, LLC in connection with expediting construction activity under this Article shall be reimbursed by the Contractor.

5. It is expressly understood and agreed that failure by the Westmoreland County Housing Authority to exercise the option either to order the Contractor to expedite an activity or to expedite the activity by other means shall not be considered to set a precedent for any other activities.

1.05 SCHEDULE FORMAT

- A. Listings: In chronological order according to the start date for each activity. Identify each activity with the applicable specification section number.
 1. Contractor shall prepare and maintain a master progress schedule in accordance with the tentative schedule provided as part of this specification section.
 - a. Contractor shall indicate completion in advance of date established for Substantial Completion. Indicate Substantial Completion on schedule to allow time for Architect's procedures necessary for certification of Substantial Completion.
- B. Sheet Size: Multiples of 8-1/2 x 11 inches.
- C. Scale and Spacing: To allow for notations and revisions.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 PRELIMINARY SCHEDULE

- A. CONSTRUCTION START DATE SHALL BE AS STATED IN A WRITTEN "NOTICE TO PROCEED". Where specific dates have been indicated within Section 01 1000, those dates shall be adhered to or with the agreement of Westmoreland County Housing Authority, modified based upon the construction start date indicated in the written "Notice to Proceed."
- B. Prepare preliminary schedule in the form of a horizontal bar chart.

3.02 CONTENT

- A. Show complete sequence of construction by activity, with dates for beginning and completion of each element of construction.
- B. Identify each item by specification section number.
- C. Provide sub-schedules to define critical portions of the entire schedule.
- D. Include conferences and meetings in schedule.
- E. Show accumulated percentage of completion of each item, and total percentage of Work completed, as of the first day of each month.
- F. Provide separate schedule of submittal dates for shop drawings, product data, and samples, and dates reviewed submittals will be required from Canzian/Johnston & Associates, LLC. Indicate decision dates for selection of finishes.
- G. Coordinate content with schedule of values specified in Section 01 2000 - Price and Payment Procedures.
- H. Provide legend for symbols and abbreviations used.

3.03 BAR CHARTS

- A. Include a separate bar for each major portion of Work or operation.
- B. Identify the first work day of each week.

3.04 REVIEW AND EVALUATION OF SCHEDULE

- A. Participate in joint review and evaluation of schedule with Project Coordinator and Canzian/Johnston & Associates, LLC at each submittal.
- B. Evaluate project status to determine work behind schedule and work ahead of schedule.
- C. After review, revise as necessary as result of review, and resubmit within 10 days.

3.05 UPDATING SCHEDULE

- A. Maintain schedules to record actual start and finish dates of completed activities.

- B. Indicate progress of each activity to date of revision, with projected completion date of each activity.
- C. Annotate diagrams to graphically depict current status of Work.
- D. Identify activities modified since previous submittal, major changes in Work, and other identifiable changes.
- E. Indicate changes required to maintain Date of Substantial Completion.
- F. Submit reports required to support recommended changes.
- G. Provide narrative report to define problem areas, anticipated delays, and impact on the schedule. Report corrective action taken or proposed and its effect.

3.06 DISTRIBUTION OF SCHEDULE

- A. Distribute copies of updated schedules to Contractor's project site file, to Subcontractors, suppliers, Canzian/Johnston & Associates, LLC, Westmoreland County Housing Authority, and other concerned parties.
- B. Instruct recipients to promptly report, in writing, problems anticipated by projections indicated in schedules.

END OF SECTION

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**SECTION 01 3217
HUD 5372 CONSTRUCTION PROGRESS SCHEDULE**

FORM OF CONSTRUCTION PROGRESS SCHEDULE

**1.01 THE CONSTRUCTION PROGRESS SCHEDULE APPLICABLE TO THIS CONTRACT IS
ATTACHED FOLLOWING THIS PAGE.**

END OF SECTION

2335	HUD 5372 Construction Progress Schedule	01 3217 - 1
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Construction Progress Schedule

**U.S. Department of Housing
and Urban Development**
Office of Public and Indian Housing

OMB Approval No. 2577-0157 (Exp. 11/30/2023)

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. HUD may not conduct or sponsor, and an applicant is not required to respond to a collection of information unless it displays a currently valid OMB control number.

Construction practices and HUD administrative requirements establish the need that HAs maintain certain records or submit certain documents in conjunction with the oversight of the award of construction contracts for the construction of new low-income housing developments or modernization of existing developments. These forms are used by HAs to provide information on the construction progress schedule and schedule of amounts for contract payments. Responses to the collection of information are required to obtain a benefit or to retain a benefit. The information requested does not lend itself to confidentiality.

1. Name of Public Housing Agency/Indian Housing Authority (PHA/IHA)

2. City	3. State	5. Project Name
4. Location		6. Project Number
7. Contract For		8. Contract Time (Days)
9. From (mm/dd/yyyy) To (mm/dd/yyyy)		10. Contract Price \$
11. Number of Buildings	12. Number of Dwelling Units	13. Number of Rooms

(Submit as many pages as necessary to cover the construction period.)	Year (yyy)						
	Month						
	Actual Monthly Value, Work in Place (\$)						
	Actual Accumulated Progress (%)						
	Anticipated Monthly Value (\$)						
	Accumulated Scheduled Progress (%)						

Submitted by	Contractor's Name		
	Title	Signature	Date (mm/dd/yyyy)
Approved by	PHA/IHA		
	Title		Date (mm/dd/yyyy)
Approved by	Architect		Date (mm/dd/yyyy)

Instructions for Preparation of Construction Progress Schedule
Form HUD-5372

General. The information required for items 1 through 6 can be obtained from the contract documents. (7.) Enter the type of work awarded by the PHA/IHA. This may be "general construction," "plumbing," "heating," "electrical," etc., depending upon prime contract awards. (8.) Enter the contract time in calendar days (unless otherwise stated). (9.) Enter the starting and completion dates as established by the Notice to Proceed.

Year and Month. At the top of the Schedule, space is provided for inserting the "Year" and "Month" to identify the times during which the work is to be performed.

Year. Enter the year when the Notice to Proceed was issued. If the starting date of the contract is such that the time assigned for completion will be carried into a succeeding year, two yearly designations will be shown, each centered over the applicable spread of time for each year.

Month. The body of the Schedule is divided into Columns, each representing a period of one month. Starting in the Column with the month stated in the Notice to Proceed, enter at the top of each column the successive months corresponding to the entire spread of the total contract time. The Schedule must contain monthly columns to cover the entire active period of contract, with extra columns for possible overruns in contract time.

Computation of Anticipated Monthly Value of Work in Place

Before presenting the form for approval, enter in each monthly column the dollar value (omit cents) of the increment of work anticipated to be put in place during that interval of time. This shall be the Contractor's best estimate of the rate of progress for each month. This section contains a suggested guide for the elapsed contract time vs. progress percentages.

The horizontal total of the monthly dollars shown for "Anticipated Monthly Value" must equal the contract price shown in the heading.

Accumulated Scheduled Progress – %

Entries on this line shall show in percentage of total completion the cumulative stage of progress that is scheduled to be reached at the end of each monthly interval. It is generally sufficient to state this anticipated progress to the nearest tenth of one percent, but for very large contracts it may be advisable to extend computations to the nearest hundredth.

The entry for the first month's column should be the % obtained by the anticipated monthly dollar value of work in place at the close of the first month being divided by the contract price.

The entry for the second month's column is obtained by the sum of the anticipated monthly dollar values of work in place for Columns 1 and 2 being divided by the contract price.

Enter in the third month's column the percentage computed similarly, using the sum of dollar values of work in place for Columns 1, 2, and 3. Continue in this manner for the succeeding monthly columns until "100" is reached in the final column.

Charting Actual Progress. The horizontal space extending through the monthly columns is divided into "Actual Monthly Value of Work in Place – \$" and Actual Accumulated Progress – %." In each monthly column show the actual accumulated % of progress and the actual value of work in place for that month, as the work progresses. An anticipated complete shutdown at some stage in the work because of adverse seasonal weather or otherwise, as may occur in road work, excavation (grading), etc., is readily shown by a gap.

The Contractor's name shall be placed in the lower left-hand corner of the form, together with the signature and title of the employee who prepared the Schedule and the date. The form then shall be sent to the Architect for review. If the Architect considers that changes are necessary to make the Schedule more realistic, it will withhold approval and so advise the Contractor. When the form is acceptable and approved by the Architect, and the PHA/ IHA, it will be returned to the Contractor, who shall reproduce and submit the number and style of prints required by the PHA/ IHA.

Normal building construction experience has proved that the rate of overall progress (as measured by work in place) accelerates slowly at the start, reaches its peak in the middle third of the construction period, and tapers down at the close. The data following illustrate the general average expectancy of a well-balanced operation and may be used as a guide. If the proposed progress lies within reasonable range of these check points, the Schedule may be considered satisfactory insofar as the time-performance feature is involved.

% of Contract Time	% of Accumulated Progress
0	0
10	2
20	8
30	20
40	37
50	57
60	75
70	89
80	96
90	99
100	100

The foregoing percentages must be tempered by consideration of seasonal weather conditions and other known conditions which may affect the progress of the work. These percentages are offered for information only.

**SECTION 01 3591
PERIOD TREATMENT PROCEDURES**

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Construction procedures appropriate for working with historic sites and structures.

1.02 RELATED REQUIREMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division I Specification Sections, apply to this Section.
- B. Section 04 0300.13 - Conservation Treatment for Period Masonry - Limestone.
- C. Section 04 0300.23 - Conservation Treatment for Period Masonry - Repointing Granite.

1.03 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements for submittal procedures.
- B. Restoration specialist's qualification statement.

1.04 QUALITY ASSURANCE

- A. Restoration Specialist Qualifications: Company specializing in restoration work, with at least three years of documented experience in comparable projects, and employing personnel skilled in the procedures and operations required by project scope of work.

1.05 FIELD CONDITIONS

- A. Smoking and use of tobacco products by personnel performing work on or about designated period treatment areas is not allowed.
- B. Exterior Cleaning Procedures: Perform cleaning and rinsing of the exterior elements only during daylight hours.
- C. Protection of Existing Elements: In accordance with manufacturer's recommendations for use of proposed products and procedures and compatibility with adjacent historic building materials, components, and vegetation.

PART 2 - PRODUCTS

2.01 CLEANING MATERIALS

- A. General: Do not use incompatible materials that may contribute to damage of the element being cleaned.
- B. Use products specifically intended by the manufacturer for cleaning historic materials or elements.

2.02 REPAIR MATERIALS

- A. General: Do not use incompatible materials contributing to damage of repaired elements.
- B. Matching: Unless otherwise required, use new materials that match historic materials in type, design, dimension, texture, detailing, and external appearance.

PART 3 - EXECUTION

3.01 PERIOD TREATMENT SPECIAL PROCEDURES

- A. Period Treatment Work: Intended to halt deterioration and stabilize the condition of building elements. Repair is necessary where preservation is not sufficient to ensure mid- to long-term survival. Select repair means and methods based on minimal disturbance of existing materials, systems, and assemblies.
- B. Selective removal and salvage of identified period items and materials and removal of rubbish and debris.

- C. Review proposed procedures for each type of element with Westmoreland County Housing Authority. Obtain approval from Westmoreland County Housing Authority before commencing work.
- D. Use methods that do not significantly change the aesthetic effect of existing elements.
- E. Notify Westmoreland County Housing Authority of visible changes in the integrity of material or components, e.g., environmental, such as biological attack, ultraviolet degradation, freeze-thaw, or structural defects such as cracks, movement, or distortion.
- F. Protect existing elements and features removed, cleaned, and reused from material damage.
- G. Exterior Work Procedures: Protect parts of the facility not included in this work from damage.
 - 1. Protect adjacent property from damage from this work.

END OF SECTION

**SECTION 01 4000
QUALITY REQUIREMENTS**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Submittals.
- B. Quality assurance.
- C. Contractor's construction-related professional design services.
- D. Contractor's design-related professional design services.
- E. Control of installation.
- F. Mock-ups.
- G. Tolerances.
- H. Manufacturers' field services.
- I. Defect Assessment.

1.02 RELATED REQUIREMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division I Specification Sections, apply to this Section.
- B. Section 01 3000 - Administrative Requirements: Submittal procedures.
- C. Section 01 6000 - Product Requirements: Requirements for material and product quality.

1.03 REFERENCE STANDARDS

1.04 DEFINITIONS

- A. Contractor's Quality Control Plan: Contractor's management plan for executing the Contract for Construction.
- B. Contractor's Professional Design Services: Design of some aspect or portion of the project by party other than the design professional of record. Provide these services as part of the Contract for Construction.
 - 1. Design Services Types Required:
 - a. Construction-Related: Services Contractor needs to provide in order to carry out the Contractor's sole responsibilities for construction means, methods, techniques, sequences, and procedures.
 - b. Design-Related: Design services explicitly required to be performed by another design professional due to highly-technical and/or specialized nature of a portion of the project. Services primarily involve engineering analysis, calculations, and design, and are not intended to alter the aesthetic aspects of the design.

1.05 CONTRACTOR'S CONSTRUCTION-RELATED PROFESSIONAL DESIGN SERVICES

- A. Coordination: Contractor's professional design services are subject to requirements of project's Conditions for Construction Contract.
- B. Provide such engineering design services as may be necessary to plan and safely conduct certain construction operations, pertaining to, but not limited to the following:
 - 1. Temporary sheeting, shoring, or supports.
 - 2. Temporary scaffolding.
 - 3. Temporary bracing.
 - 4. Temporary stairs or steps required for construction access only.
 - 5. Temporary hoist(s) and rigging.
 - 6. Investigation of soil conditions to support construction equipment.

1.06 CONTRACTOR'S DESIGN-RELATED PROFESSIONAL DESIGN SERVICES

- A. Coordination: Contractor's professional design services are subject to requirements of project's Conditions for Construction Contract.
- B. Base design on performance and/or design criteria indicated in individual specification sections.

1.07 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Designer's Qualification Statement: Submit for Canzian/Johnston & Associates, LLC's knowledge as contract administrator, or for Westmoreland County Housing Authority's information.
 - 1. Include information for each individual professional responsible for producing, or supervising production of, design-related professional services provided by Contractor.
 - a. Full name.
 - b. Professional licensure information.
 - c. Statement addressing extent and depth of experience specifically relevant to design of items assigned to Contractor.
- C. Design Data: Submit for Project Coordinator and Canzian/Johnston & Associates, LLC's knowledge for the limited purpose of assessing conformance with information given and the design concept expressed in the contract documents, or for Westmoreland County Housing Authority's information.
 - 1. Include required product data and shop drawings.
 - 2. Include signature and seal of design professional responsible for allocated design services on calculations and drawings.
- D. Certificates: When specified in individual specification sections, submit certification by the manufacturer and Contractor or installation/application subcontractor to Canzian/Johnston & Associates, LLC, in quantities specified for Product Data.
 - 1. Indicate material or product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.
 - 2. Certificates may be recent or previous test results on material or product, but must be acceptable to Canzian/Johnston & Associates, LLC.
- E. Manufacturer's Instructions: When specified in individual specification sections, submit printed instructions for delivery, storage, assembly, installation, start-up, adjusting, and finishing, for the Westmoreland County Housing Authority's information. Indicate special procedures, perimeter conditions requiring special attention, and special environmental criteria required for application or installation.
- F. Manufacturer's Field Reports: Submit reports for Canzian/Johnston & Associates, LLC's benefit as contract administrator or for Westmoreland County Housing Authority.
 - 1. Submit for information for the limited purpose of assessing conformance with information given and the design concept expressed in the contract documents.

1.08 QUALITY ASSURANCE

- A. Designer Qualifications: Where professional engineering design services and design data submittals are specifically required of Contractor by Contract Documents, provide services of a Professional Engineer experienced in design of this type of work and licensed in Pennsylvania.
- B. Contractor's Quality Control (CQC) Plan:
 - 1. Prior to start of work, submit a comprehensive plan describing how contract deliverables will be produced. Tailor CQC plan to specific requirements of the project. Include the following information:
 - a. Management Structure: Identify personnel responsible for quality. Include a chart showing lines of authority.
 - b. Management Approach: Define, describe, and include in the plan specific methodologies used in executing the work.

- c. Westmoreland County Housing Authority will not make a separate payment for providing and maintaining a Quality Control Plan. Include associated costs in Bid price.
- d. Acceptance of the plan is required prior to start of construction activities not including mobilization work. Westmoreland County Housing Authority's acceptance of the plan will be conditional and predicated on continuing satisfactory adherence to the plan. Westmoreland County Housing Authority reserves the right to require Contractor to make changes to the plan and operations, including removal of personnel, as necessary, to obtain specified quality of work results.

1.09 REFERENCES AND STANDARDS

- A. For products and workmanship specified by reference to a document or documents not included in the Project Manual, also referred to as reference standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.
- B. Conform to reference standard of date of issue current on date of Contract Documents, except where a specific date is established by applicable code.
- C. Obtain copies of standards where required by product specification sections.
- D. Should specified reference standards conflict with Contract Documents, request clarification from Canzian/Johnston & Associates, LLC before proceeding.
- E. Neither the contractual relationships, duties, or responsibilities of the parties in Contract nor those of Project Coordinator and Canzian/Johnston & Associates, LLC shall be altered from the Contract Documents by mention or inference otherwise in any reference document.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 CONTROL OF INSTALLATION

- A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce Work of specified quality.
- B. Comply with manufacturers' instructions, including each step in sequence.
- C. Should manufacturers' instructions conflict with Contract Documents, request clarification from Canzian/Johnston & Associates, LLC before proceeding.
- D. Comply with specified standards as minimum quality for the Work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- E. Have Work performed by persons qualified to produce required and specified quality.
- F. Verify that field measurements are as indicated on shop drawings or as instructed by the manufacturer.
- G. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, and disfigurement.

3.02 TOLERANCES

- A. Comply with manufacturers' tolerances. Should manufacturers' tolerances conflict with Contract Documents, request clarification from Canzian/Johnston & Associates, LLC before proceeding.

3.03 MANUFACTURERS' FIELD SERVICES

- A. When specified in individual specification sections, require material or product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, as applicable, and to initiate instructions when necessary.

- B. Report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.

3.04 DEFECT ASSESSMENT

- A. Replace Work or portions of the Work not conforming to specified requirements at no additional cost to the Owner.
- B. Upon completion of inspection, testing, sample-taking, and similar services, repair damaged construction and restore substrates and finishes to eliminate deficiencies in visual qualities of exposed finishes at no additional cost to Westmoreland County Housing Authority. Comply with Contract Document requirements for "Cutting and Patching".
- C. The General Contractor shall protect construction exposed by or for quality control service activities, and protect repaired construction.
- D. Repair and protection is Contractor's responsibility, regardless of assignment of responsibility for inspection, testing, or similar services.
- E. If, in the opinion of the Owner, it is not practical to remove and replace the Work, the Owner will direct an appropriate remedy or adjust payment.

END OF SECTION

**SECTION 01 5000
TEMPORARY FACILITIES AND CONTROLS**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Temporary utilities.
- B. Temporary sanitary facilities.
- C. Temporary Controls: Barriers, enclosures, and fencing.
- D. Temporary Fire Protection.
- E. Vehicular access and parking.
- F. Waste removal facilities and services.

1.02 RELATED

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

1.03 REFERENCE STANDARDS

- A. NFPA 10 - Standard for Portable Fire Extinguishers; 2022.
- B. NFPA 241 - Standard for Safeguarding Construction, Alteration, and Demolition Operations; 2022, with Errata (2021).

1.04 TEMPORARY UTILITIES

- A. Each Prime Contractor shall provide for its own electrical power, lighting, and water required for construction purposes.
 - 1. Electrical power , consisting of connection to existing facilities.
 - a. Do not disrupt Westmoreland County Housing Authority's need for continuous service.
 - b. Exercise measures to conserve energy.
 - c. Should the temporary service adversely impact the Westmoreland County Housing Authority continued use of the facility, as determined by Westmoreland County Housing Authority, then the Contractor shall make other arrangements for a temporary power supply at no additional cost to Westmoreland County Housing Authority.
 - d. The Contractor shall extend, terminate and maintain temporary electrical power to any and all construction areas, including new and remodeled areas, construction trailers (field offices), and portable equipment requiring power at locations acceptable to the Owner.
 - e. Where a service of a type other than normal temporary construction power is required, the Prime Contractor requiring same shall install and pay all costs of such special service.
 - 1) Construction power for welders, cranes, special equipment requiring higher voltages than temporarily provided and construction elevators must be provided from a source other than the temporary and permanent electrical service for the duration of the project.
 - 2. Water supply, consisting of connection to existing facilities.
 - a. Exercise measures to conserve water.
 - b. Should the temporary service adversely impact the Westmoreland County Housing Authority continued use of the facility, as determined by Westmoreland County Housing Authority, then the Contractor shall make other arrangements for a temporary water supply at no additional cost to Westmoreland County Housing Authority.
- B. Use trigger-operated nozzles for water hoses, to avoid waste of water.

- C. Remove temporary utilities, equipment, facilities, materials, prior to Substantial Completion inspection.
 - 1. Clean and repair damage caused by installation or use of temporary work.
 - 2. Restore facilities used during construction to original condition.
- D. Westmoreland County Housing Authority shall pay for all utilities used from existing Westmoreland County Housing Authority facilities.

1.05 TEMPORARY SANITARY FACILITIES

- A. Each Prime Contractor shall provide and maintain required facilities and enclosures for all its personnel engaged on the Project in compliance with laws and regulations in force in the area of the project. Provide at time of project mobilization.
 - 1. Sanitary facilities include temporary toilets, wash facilities, and drinking water fixtures. The Contractor shall comply with regulations and health codes for type, number, location, operation, and maintenance facilities.
 - 2. Minimum acceptable facilities unless indicated otherwise:
 - a. One (1) portable toilet.
 - b. Additional portable toilet units as required laws and regulations in force in the area of the project
 - 3. The Contractor shall install wash facilities supplied with potable water at convenient locations for personnel involved in handling materials that require wash-up for a healthy and sanitary condition. Dispose of drainage properly. Supply cleaning compounds appropriate for each condition.
 - 4. Provide toilet tissue, paper towels, paper cups, and similar disposable materials for each facility. Provide covered waste containers for used materials, and empty at regular intervals.
- B. Use of existing facilities is permitted.
- C. Maintain daily in clean and sanitary condition.
- D. At end of construction, return facilities to same or better condition as originally found.

1.06 BARRIERS

- A. Provide barriers to prevent unauthorized entry to construction areas, to prevent access to areas that could be hazardous to workers or the public, to allow for owner's use of site and to protect existing facilities and adjacent properties from damage from construction operations and demolition.
- B. Each Contractor shall provide barricades and covered walkways required by governing authorities for public rights-of-way and for public access to existing building for performance of the work including, but not limited to, the following.
- C. Each Contractor shall protect non-owned vehicular traffic, stored materials, site, and structures from damage.

1.07 EXTERIOR ENCLOSURES

- A. Each Contractor, where deemed necessary by the Project Coordinator, shall provide temporary weather tight closure of exterior openings to accommodate acceptable working conditions and protection for Products, to allow for temporary heating and maintenance of required ambient temperatures identified in individual specification sections, and to prevent entry of unauthorized persons.

1.08 TEMPORARY FIRE PROTECTION

- A. Each Prime Contractor shall provide and maintain temporary fire-protection facilities to protect against controllable fire losses.
- B. Each Prime Contractor shall comply with NFPA 10.
- C. Coordinate with Westmoreland County Housing Authority's security program.

1.09 VEHICULAR ACCESS AND PARKING

- A. Comply with regulations relating to use of streets and sidewalks, access to emergency facilities, and access for emergency vehicles.
- B. Coordinate access and haul routes with governing authorities and Westmoreland County Housing Authority.
- C. Provide and maintain access to fire hydrants, free of obstructions.
- D. Provide temporary parking areas to accommodate construction personnel. When site space is not adequate, provide additional off-site parking.
 - 1. Coordinate with Westmoreland County Housing Authority and the local municipality for the location of parking.
 - 2. Contractor shall not inhibit the Westmoreland County Housing Authority's or Westmoreland County Housing Authority's tenants' use of parking areas or other facilities without prior permission of Westmoreland County Housing Authority.
 - 3. Parking for the Troutman Building is public access parking. Parking permits must be obtained through the municipality.

1.10 WASTE REMOVAL

- A. Each Prime Contractor shall provide waste removal facilities and services as required to maintain the site in clean and orderly condition.
 - 1. The Contractor shall be responsible for providing trash collection facilities (dumpsters) for the project, relocating said facilities as necessary during the Project construction, and removing said facilities at Project completion. Note: Westmoreland County Housing Authority encourages all Contractors to recycle to the greatest extent possible.
 - 2. Trash collection facilities shall be within 100 feet of the exterior of the building entrance and shall be coordinated with the Owner and the municipality.
 - 3. Each Prime Contractor and subcontractor(s) shall be responsible to collect and deposit their own debris, garbage, litter, rubble, and rubbish in such collection facilities daily. Contractors shall dismantle crates, crush cardboard boxes, and otherwise attempt to compact all such trash deposited in these collection facilities.
 - 4. Each Prime shall be responsible for the overall cleanliness of the entire jobsite, as specified.
 - 5. Provide containers with lids. Remove trash from site periodically.
 - 6. If materials to be recycled or re-used on the project must be stored on-site, provide suitable non-combustible containers; locate containers holding flammable material outside the structure unless otherwise approved by the authorities having jurisdiction.
 - 7. Open free-fall chutes are not permitted. Terminate closed chutes into appropriate containers with lids.

1.11 QUALITY ASSURANCE

- A. Comply with industry standards and applicable laws and regulations of authorities having jurisdiction, including, but not limited to, following:
 - 1. Building code requirements.
 - 2. Health and safety regulations.
 - 3. Local police, fire department, and rescue squad rules.
 - 4. Environmental protection regulations.
- B. Standards:
 - 1. Comply with most current NFPA 241 and ANSI A10 Series Standards.
- C. Arrange with authorities having jurisdiction for inspections of temporary facilities before use. Obtain required certifications and permits at no additional cost to Westmoreland County Housing Authority.

1.12 REMOVAL OF FACILITIES AND CONTROLS

- A. Remove temporary equipment, facilities, materials, prior to Substantial Completion inspection.

- B. Clean and repair damage caused by installation or use of temporary work.
- C. Restore existing facilities used during construction to original condition.
- D. Restore new permanent facilities used during construction to specified condition.

1.13 PENNSYLVANIA ONE CALL

- A. The Contractor shall be responsible to comply with Pennsylvania requirements by calling, soliciting and recording the necessary permit number for the 72-hour program for identification of all existing utilities associated with the Contractor's excavation operations. Where a utility company will not come onto the Owner's property to identify branch feeds or utilities, each Contractor shall also be responsible for the ways-means-costs associated with the utility company or qualified, insured, consulting company to perform such stake-out on the Owner's property.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

**SECTION 01 6000
PRODUCT REQUIREMENTS**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. General product requirements.
- B. Re-use of existing products.
- C. Transportation, handling, storage and protection.
- D. Product option requirements.
- E. Substitution limitations and procedures.
- F. Maintenance materials, including extra materials, spare parts, tools, and software.

1.02 RELATED REQUIREMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division I Specification Sections, apply to this Section.
- B. Section 01 6116 - Volatile Organic Compound (VOC) Content Restrictions: Requirements for VOC-restricted product categories.

1.03 REFERENCE STANDARDS

- A. CSI/CSC Form 1.5C - Substitution Request (During the Bidding/Negotiating Stage); Current Edition.
- B. CSI/CSC Form 13.1A - Substitution Request (After the Bidding/Negotiating Phase); Current Edition.
- C. NFPA 70 - National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.

1.04 SUBMITTALS

- A. Proposed Products List: Submit list of major products proposed for use, with name of manufacturer, trade name, and model number of each product.
 - 1. Submit within 15 days after date of Notice to Proceed.
 - 2. For products specified only by reference standards, list applicable reference standards.
 - 3. Coordinate proposed product list with Contractor's construction schedule.
 - 4. Proposed Products List may be submitted as additional information provided within the Submittal Schedule.
- B. Product Data Submittals: Submit manufacturer's standard published data. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information specific to this Project.
- C. Shop Drawing Submittals: Prepared specifically for this Project; indicate utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.
- D. Sample Submittals: Illustrate functional and aesthetic characteristics of the product, with integral parts and attachment devices. Coordinate sample submittals for interfacing work.
 - 1. For selection from standard finishes, submit samples of the full range of the manufacturer's standard colors, textures, and patterns.

PART 2 PRODUCTS

2.01 EXISTING PRODUCTS

- A. Do not use materials and equipment removed from existing premises unless specifically required or permitted by Contract Documents.

- B. Unforeseen historic items encountered remain the property of the Westmoreland County Housing Authority; notify Westmoreland County Housing Authority promptly upon discovery; protect, remove, handle, and store as directed by Westmoreland County Housing Authority.
- C. Existing materials and equipment indicated to be removed, but not to be re-used, relocated, reinstalled, delivered to the Westmoreland County Housing Authority, not claimed by right of first refusal or otherwise indicated as to remain the property of the Westmoreland County Housing Authority, become the property of the Contractor; promptly remove from site.
- D. Reused Products: Reused products include materials and equipment previously used in this or other construction, salvaged and refurbished as specified.

2.02 NEW PRODUCTS

- A. Provide new products, undamaged and unused at the time of installation, unless specifically required or permitted by the Contract Documents.
 - 1. Product Selection:
 - a. Manufactured and fabricated products:
 - 1) Design, fabricate and assemble in accordance with the best engineering and shop practices.
 - 2) Manufacture like parts of duplicate units to standard sizes and gages, to be interchangeable.
 - 3) Two or more items of same kind shall be identical, by same manufacturer.
 - 4) Provide products suitable for service conditions.
 - 5) Adhere to equipment capacities, sizes and dimensions shown or specified, unless variations are specifically approved in writing.
 - b. Do not use material or equipment for any purpose other than that for which it is designed or is specified.
 - c. Provide products complete with accessories, trim, finish safety guards, and other devices and details needed for a complete installation and for intended use and effect.
 - d. Provide standard products of types that have been produced and used successfully in similar situations on other projects as acceptable to Canzian/Johnston & Associates, LLC.
- B. Use of products having any of the following characteristics is not permitted:
 - 1. Made outside the United States, its territories, Canada, or Mexico unless specifically indicated.
 - 2. Made using or containing CFC's or HCFC's.
 - 3. Made of wood from newly cut old growth timber.
 - 4. Containing lead, cadmium, or asbestos.
- C. Where other criteria are met, Contractor shall give preference to products that:
 - 1. If wet-applied, have lower VOC content, as defined in Section 01 6116.
 - 2. Are manufactured within the United States.
 - 3. Are extracted, harvested, and/or manufactured closer to the location of the project.
 - 4. Have longer documented life span under normal use.
 - 5. Result in less construction waste.
 - 6. Are made of vegetable materials that are rapidly renewable.
 - 7. Are made of recycled materials.
- D. Provide interchangeable components of the same manufacture for components being replaced.
- E. Wiring Terminations: Provide terminal lugs to match branch circuit conductor quantities, sizes, and materials indicated. Size terminal lugs to NFPA 70, include lugs for terminal box.

2.03 PRODUCT OPTIONS

- A. Product selection is governed by Contract Documents, governing regulations and as follows:
 - 1. Proprietary specification requirements: None.

2. Semiproprietary specification requirements: Where two or more products or manufacturers are named, provide one of products indicated or approved equal.
 - a. Where products or manufacturers are specified by name, accompanied by term "or equal," or "or approved substitute", comply with General Conditions to obtain approval for use of an unnamed product.
3. Descriptive specification requirements: Where Specifications describe a product or assembly, listing exact characteristics required, with or without use of brand or trade name, provide product or assembly that provides characteristics and otherwise complies with Contract requirements.
4. Performance specification requirements: Where Specifications require compliance with performance requirements, provide products that comply with these requirements, and are recommended by manufacturer for application indicated. General overall performance of product is implied where product is specified for a specific application.
 - a. Manufacturer's recommendations may be contained in published product literature, or by manufacturer's certification of performance.
5. Compliance with standards, codes and regulations: Where Specifications only require compliance with an imposed code, standard or regulation, select a product that complies with standards, codes or regulations specified.
6. Visual matching: Where Specifications require matching an established sample, Canzian/Johnston & Associates, LLC's decision will be final on whether a proposed product matches satisfactorily.
7. Visual selection: Where specified product requirements include the phrase "...as selected from manufacturer's standard colors, patterns, textures..." or a similar phrase, select a product and manufacturer that complies with other specified requirements. Canzian/Johnston & Associates, LLC shall select color, pattern, and texture from product line selected.
8. Matching existing: Wherever existing construction is indicated to be repaired, refurbished, or removed and replaced, and wherever new work is to be added to existing construction, materials incorporated into new shall (unless otherwise noted) match similar materials in existing construction in quality, size, color, texture, finish, and similar characteristics. Canzian/Johnston & Associates, LLC shall be the sole judge as to whether or not each new material is an acceptable match to an existing material.

2.04 MAINTENANCE MATERIALS

- A. Furnish extra materials, spare parts, tools, and software of types and in quantities specified in individual specification sections.
- B. Deliver and place in location as directed; obtain receipt prior to final payment.

PART 3 EXECUTION

3.01 SUBSTITUTION PROCEDURES

- A. No substitution requests shall be considered from manufacturer's representatives or product vendors unless submitted through a Potential Bidder. Document each request with complete data substantiating compliance of the proposed substitution with Contract Documents.
- B. Instructions to Bidders specifies time restrictions for submitting requests for substitutions during the bidding period and the documents required.
 1. Requests for substitution made during bidding shall utilize CSI/CSC Form 1.5C.
 2. Substitution Requests must be received at Canzian/Johnston & Associates, LLC offices no later than ten (10) days prior to Receipt of Bids.
 3. Complete product data with drawings, manufacturer's specifications, test reports and samples as necessary for proper evaluation by Canzian/Johnston & Associates, LLC. Include a detailed comparison of the significant qualities of the proposed substitution with those of the specified product.

4. A statement setting forth changes in other materials, equipment or other portions of the Work, including changes in the work of other contracts that incorporation of the proposed substitution would require.
- C. Westmoreland County Housing Authority does not intend to accept substitutions following acceptance of bids. Document each request with complete data substantiating compliance of proposed substitution with Contract Documents and substantiating reason for substitution.
1. Use CSI/CSC Form 13.1A.
 2. Complete product data with drawings, manufacturer's specifications, test reports and samples as necessary for proper evaluation by Canzian/Johnston & Associates, LLC. Include a detailed comparison of the significant qualities of the proposed substitution with those of the specified product.
 3. A statement setting forth changes in other materials, equipment or other portions of the Work, including changes in the work of other contracts that incorporation of the proposed substitution would require.
 4. Proposed adjustment to Contract Sum and to Construction Schedule if substitution is accepted.
- D. A request for substitution constitutes a representation that the submitter:
1. Has investigated proposed product and determined that it meets or exceeds the quality level of the specified product.
 2. Agrees to provide the same warranty for the substitution as for the specified product.
 3. Agrees to coordinate installation and make changes to other Work that may be required for the Work to be complete with no additional cost to Westmoreland County Housing Authority.
 4. The understanding that certain products may be specified due to unique visual or performance requirements required by Canzian/Johnston & Associates, LLC. Due to this, or other reasons best known to Westmoreland County Housing Authority or Canzian/Johnston & Associates, LLC, there may be substitutions, normally accepted as equals, that Canzian/Johnston & Associates, LLC shall not approve. In these matters, the decision of Canzian/Johnston & Associates, LLC shall be final.
 5. Agreement to bear the cost of time spent by Canzian/Johnston & Associates, LLC and any consultants in evaluating or processing proposed substitutions.
 - a. Sums sufficient to pay Canzian/Johnston & Associates, LLC shall be deducted by Westmoreland County Housing Authority from the Contract Sum.
 - b. Canzian/Johnston & Associates, LLC and the consultants shall keep accurate records of time and expenses that are expended in evaluating substitutions. The Contractor will be charged a rate of 2.5 times Canzian/Johnston & Associates, LLC's Direct Expense, 1.25 times the amount billed to Canzian/Johnston & Associates, LLC by any consultants, and 1.10 times the actual cost of expenses.
 6. That the cost data presented is complete and includes all related costs under this Contract, except Canzian/Johnston & Associates, LLC's redesign costs, and Contractor waives all claims for additional costs related to substitution which subsequently become apparent.
 7. Waives claims for additional costs or time extension that may subsequently become apparent.
 8. Delays, including those of other Contractors, shall not be encountered and if encountered or subsequently become apparent shall be the sole responsibility of the Contractor with no additional cost to Westmoreland County Housing Authority.
 9. Agrees to reimburse Westmoreland County Housing Authority and Canzian/Johnston & Associates, LLC for review or redesign services associated with re-approval by authorities.
- E. Canzian/Johnston & Associates, LLC shall review requests for substitutions with reasonable promptness, and advise the Contractor in writing of a decision to accept or reject the requested substitution.

- F. Substitutions will not be considered when they are indicated or implied on shop drawing or product data submittals, without separate written request, or when acceptance will require revision to the Contract Documents.

3.02 TRANSPORTATION AND HANDLING

- A. Package products for shipment in manner to prevent damage; for equipment, package to avoid loss of factory calibration.
- B. If special precautions are required, attach instructions prominently and legibly on outside of packaging.
- C. Coordinate schedule of product delivery to designated prepared areas in order to minimize site storage time and potential damage to or theft of stored materials.
 - 1. Prevent overcrowding of construction areas.
- D. Transport and handle products in accordance with manufacturer's instructions.
- E. Transport materials in covered trucks to prevent contamination of product and littering of surrounding areas.
 - 1. Deliver products in manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting and installing.
- F. Promptly inspect shipments to ensure that products comply with requirements, quantities are correct, and products are undamaged.
 - 1. Promptly remove damaged material and unsuitable items from the job site, and promptly replace with material meeting the specified requirements at no additional cost to Westmoreland County Housing Authority.
- G. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage, and to minimize handling.
- H. Westmoreland County Housing Authority shall reject as non-complying such material and products that do not bear identification satisfactory to Westmoreland County Housing Authority as to manufacturer, grade, quality and other pertinent information.
- I. Arrange for the return of packing materials, such as wood pallets, where economically feasible.

3.03 STORAGE AND PROTECTION

- A. Provide protection of stored materials and products against theft, casualty, or deterioration.
- B. Designate receiving/storage areas for incoming products so that they are delivered according to installation schedule and placed convenient to work area in order to minimize waste due to excessive materials handling and misapplication.
 - 1. Structural Loading Limitations: Handle and store products and materials so as not to exceed static and dynamic load-bearing capacities of project roof areas.
- C. Store and protect products in accordance with manufacturers' instructions.
 - 1. Store heavy materials away from structure in manner that shall not endanger any new or existing supporting construction.
- D. Store with seals and labels intact and legible.
- E. Store sensitive products in weathertight, climate-controlled enclosures in an environment favorable to product.
- F. For exterior storage of fabricated products, place on sloped supports above ground.
- G. Provide bonded off-site storage and protection when site does not permit on-site storage or protection at no additional cost.
- H. Protect products from damage or deterioration due to construction operations, weather, precipitation, humidity, temperature, sunlight and ultraviolet light, dirt, dust, and other contaminants.
- I. Comply with manufacturer's warranty conditions, if any.

- J. Do not store products directly on the ground.
- K. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.
- L. Store loose granular materials on solid flat surfaces in a well-drained area. Prevent mixing with foreign matter.
- M. Prevent contact with material that may cause corrosion, discoloration, or staining.
- N. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.
- O. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.

3.04 REPAIRS AND REPLACEMENTS

- A. In event of damage, promptly make replacements and repairs to the approval of Canzian/Johnston & Associates, LLC and at no additional cost to Westmoreland County Housing Authority.
- B. Additional time required to secure replacements and to make repairs will not be considered by Westmoreland County Housing Authority to justify an extension in the Contract time of completion.
 - 1. Delays and costs, including those of other Prime Contractors, shall be the responsibility of the Contractor causing such delays as determined by Westmoreland County Housing Authority.

END OF SECTION

SECTION 01 6116
VOLATILE ORGANIC COMPOUND (VOC) CONTENT RESTRICTIONS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Requirements for VOC-Content-Restricted products.

1.02 RELATED REQUIREMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division I Specification Sections, apply to this Section.
- B. Section 01 3000 - Administrative Requirements: Submittal procedures.
- C. Section 01 4000 - Quality Requirements: Procedures for testing and certifications.
- D. Section 01 6000 - Product Requirements: Fundamental product requirements, substitutions and product options, delivery, storage, and handling.

1.03 DEFINITIONS

- A. VOC-Content-Restricted Products: All products in the following product categories, whether specified or not:
 - 1. Exterior paints and coatings applied on site.
 - 2. Exterior adhesives and sealants applied on site.
 - 3. Other products identified within the provisions of Subchapter C issued under section 5 of the Air Pollution Control Act of the Commonwealth of Pennsylvania.
- B. Adhesives: All gunnable, trowelable, liquid-applied, and aerosol adhesives, whether specified or not; including flooring adhesives, resilient base adhesives, and pipe jointing adhesives.
- C. Sealants: All gunnable, trowelable, and liquid-applied joint sealants and sealant primers, whether specified or not; including firestopping sealants and duct joint sealers.

1.04 REFERENCE STANDARDS

- A. 40 CFR 59, Subpart D - National Volatile Organic Compound Emission Standards for Architectural Coatings; U.S. Environmental Protection Agency; Current Edition.
- B. ASTM D3960 - Standard Practice for Determining Volatile Organic Compound (VOC) Content of Paints and Related Coatings; 2005 (Reapproved 2018).
- C. CARB (SCM) - Suggested Control Measure for Architectural Coatings; California Air Resources Board; 2020.
- D. GreenSeal GS-36 - Standard for Adhesives for Commercial Use; 2013.
- E. SCAQMD 1113 - Architectural Coatings; 1977, with Amendment (2016).
- F. SCAQMD 1168 - Adhesive and Sealant Applications; 1989, with Amendment (2022).

1.05 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements for submittal procedures.
- B. Product Data: For each VOC-restricted product used in the project, submit evidence of compliance.

1.06 QUALITY ASSURANCE

- A. VOC Content Test Method: 40 CFR 59, Subpart D (EPA Method 24), or ASTM D3960, unless otherwise indicated.
 - 1. Evidence of Compliance: Acceptable types of evidence are:
 - a. Report of laboratory testing performed in accordance with requirements.
- B. Testing Agency Qualifications: Independent firm specializing in performing testing and inspections of the type specified in this section.

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PART 2 PRODUCTS

2.01 MATERIALS

- A. All Products: Comply with the most stringent of federal, State, and local requirements, or these specifications.
- B. VOC-Content-Restricted Products: VOC content not greater than required by the following:
 - 1. Adhesives, Including Flooring Adhesives: SCAQMD 1168 Rule.
 - 2. Aerosol Adhesives: GreenSeal GS-36.
 - 3. Joint Sealants: SCAQMD 1168 Rule.
 - 4. Paints and Coatings: Each color; most stringent of the following:
 - a. 40 CFR 59, Subpart D.
 - b. SCAQMD 1113 Rule.
 - c. CARB (SCM).
 - d. Ozone Transport Commission (OTC) Model Rule, Architectural, Industrial, and Maintenance Coatings.
 - e. Architectural coatings VOC limits of Pennsylvania.

PART 3 EXECUTION

3.01 FIELD QUALITY CONTROL

- A. Westmoreland County Housing Authority reserves the right to reject non-compliant products, whether installed or not, and require their removal and replacement with compliant products at no extra cost to Westmoreland County Housing Authority.
- B. All additional costs and delays to restore indoor air quality due to installation of non-compliant products will be borne by Contractor responsible for installation on non-compliant products.

END OF SECTION

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**SECTION 01 7000
EXECUTION AND CLOSEOUT REQUIREMENTS**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Examination, preparation, and general installation procedures.
- B. Cutting (including excavation if applicable) and patching of the Work required to:
 - 1. Make the several parts fits properly;
 - 2. Provide for the installation of work;
 - 3. Uncover work to provide for installing, inspecting, or both, of ill-timed work and new work;
 - a. Upon Canzian/Johnston & Associates, LLC's or Inspector's request uncover work to provide for inspection by Canzian/Johnston & Associates, LLC or Inspector of covered work, and remove samples of installed materials for testing.
 - 4. Remove and replace work not conforming to requirements of the Contract Documents;
 - a. Remove and replace defective work.
 - 5. Provide finish surfaces related to demolition work.
- C. Cleaning and protection.
- D. Closeout procedures, except payment procedures.

1.02 RELATED REQUIREMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.
- B. Section 01 1000 - SUMMARY: Limitations on working in existing building; continued occupancy; work sequence; identification of salvaged and relocated materials.
- C. Section 01 3000 - Administrative Requirements: Submittals procedures and Project Coordination.
- D. Section 01 4000 - Quality Requirements: Testing and inspection procedures.
- E. Section 01 5000 - Temporary Facilities and Controls: Temporary exterior enclosures.
- F. Section 01 7800 - Closeout Submittals: Project record documents, operation and maintenance data, warranties and bonds.
- G. Section 02 4100 - Demolition: Demolition of site improvements and selective demolition for alterations.

1.03 REFERENCE STANDARDS

1.04 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Demolition Plan: Submit demolition plan as specified by OSHA and local authorities.
 - 1. Indicate extent of demolition, removal sequence, bracing and shoring, and location and construction of barricades and fences.
 - 2. Identify demolition firm and submit qualifications.
 - 3. Include a summary of safety procedures.
- C. Cutting and Patching: To provide for Architect's observation, submit written request for Architect's consent in advance of cutting or alteration which affects:
 - 1. Structural integrity of any element of Project.
 - 2. Integrity of weather exposed or moisture resistant element.
 - 3. Efficiency, maintenance, or safety of any operational element.
 - 4. Visual qualities of sight exposed elements.
 - 5. Work of Westmoreland County Housing Authority or separate Contractor.
 - 6. Change of materials or methods for cutting and patching.
 - 7. Include in request:

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- a. Identification of Project.
- b. Location and description of affected work.
- c. Necessity for cutting or alteration.
- d. Description of proposed work and products to be used.
- e. Alternatives to cutting and patching.
- f. Effect on work of Westmoreland County Housing Authority or separate Contractor.
- g. Written permission of affected separate Contractor.
- h. Date and time work will be executed.

1.05 QUALIFICATIONS

- A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.
- B. For demolition work, employ a firm specializing in the type of work required.
- C. For cleaning, the General Contractor shall conduct daily inspection to verify that requirements for cleanliness are being met.
 - 1. In addition to the standards described herein, comply with pertinent requirements of governmental agencies having jurisdiction.

1.06 PROJECT CONDITIONS

- A. Use of explosives is not permitted.
- B. Dust Control: Execute work by methods to minimize raising dust from construction operations. Provide positive means to prevent air-borne dust from dispersing into atmosphere and over adjacent property.
 - 1. Provide dust-proof enclosures to prevent entry of dust generated outdoors.
 - 2. Provide dust-proof barriers between construction areas and areas continuing to be occupied by Westmoreland County Housing Authority.
- C. Noise Control: Provide methods, means, and facilities to minimize noise produced by construction operations.
 - 1. Outdoors: Limit conduct of especially noisy exterior work to the hours of 8 am to 5 pm.
 - 2. Indoors: Limit conduct of especially noisy interior work to 8 am to 5 pm.
- D. Pest and Rodent Control: Provide methods, means, and facilities to prevent pests and insects from damaging the work.
- E. Pollution Control: Provide methods, means, and facilities to prevent contamination of soil, water, and atmosphere from discharge of noxious, toxic substances, and pollutants produced by construction operations. Comply with federal, state, and local regulations.

1.07 COORDINATION

- A. See Section 01 1000 for occupancy-related requirements.
- B. Coordinate scheduling, submittals, and work of the various sections of the Project Manual to ensure efficient and orderly sequence of installation of interdependent construction elements, with provisions for accommodating items installed later.
- C. Notify affected utility companies and comply with their requirements.
- D. Coordinate completion and clean-up of work of separate sections.
- E. After Westmoreland County Housing Authority occupancy of premises, coordinate access to site for correction of defective work and work not in accordance with Contract Documents, to minimize disruption of Westmoreland County Housing Authority's activities.

PART 2 PRODUCTS

2.01 PATCHING MATERIALS

- A. New Materials: As specified in product sections; match existing products and work for patching and extending work.

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- B. Type and Quality of Existing Products: Determine by inspecting and testing products where necessary, referring to existing work as a standard.
- C. Product Substitution: For any proposed change in materials, submit request for substitution described in Section 01 6000.

2.02 CLEANING MATERIALS

- A. Use only the cleaning materials and equipment which are compatible with the surface being cleaned, as recommended by the manufacturer of the material.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that existing site conditions and substrate surfaces are acceptable for subsequent work. Start of work means acceptance of existing conditions.
- B. Verify that existing substrate is capable of structural support or attachment of new work being applied or attached.
- C. Examine and verify specific conditions described in individual specification sections.
- D. Take field measurements before confirming product orders or beginning fabrication, to minimize waste due to over-ordering or misfabrication.
- E. Prior to Cutting: Examine existing conditions prior to commencing work, including elements subject to damage or movement during cutting and patching. After uncovering existing work, assess conditions affecting performance of work. Beginning of cutting or patching means acceptance of existing conditions.
 - 1. If uncovered conditions are not reasonably anticipated or inferable based upon construction industry standards and past work experience, immediately notify the Architect and secure needed directions.
 - 2. Do not proceed until unsatisfactory conditions are corrected.

3.02 PREPARATION

- A. Clean substrate surfaces prior to applying next material or substance.
- B. Seal cracks or openings of substrate prior to applying next material or substance.
- C. Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying any new material or substance in contact or bond.

3.03 GENERAL INSTALLATION REQUIREMENTS

- A. In addition to compliance with regulatory requirements, conduct construction operations in compliance with NFPA 241, including applicable recommendations in Appendix A.
- B. Install products as specified in individual sections, in accordance with manufacturer's instructions and recommendations, and so as to avoid waste due to necessity for replacement.
- C. Make vertical elements plumb and horizontal elements level, unless otherwise indicated.
- D. Install equipment and fittings plumb and level, neatly aligned with adjacent vertical and horizontal lines, unless otherwise indicated.
- E. Make consistent texture on surfaces, with seamless transitions, unless otherwise indicated.
- F. Make neat transitions between different surfaces, maintaining texture and appearance.

3.04 CUTTING AND PATCHING

- A. Whenever possible, execute the work by methods that avoid cutting or patching.
- B. Perform whatever cutting and patching is necessary to:
 - 1. Complete the work.
 - 2. Fit products together to integrate with other work.
 - 3. Match work that has been cut to adjacent work.
 - 4. Repair areas adjacent to cuts to required condition.

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5. Repair new work damaged by subsequent work.
 6. Remove samples of installed work for testing when requested.
 7. Remove and replace defective and non-conforming work.
 8. Repair surfaces exposed to view as a result of demolition work.
- C. Execute work by methods that avoid damage to other work and that will provide appropriate surfaces to receive patching and finishing. In existing work, minimize damage and restore to original condition.
- D. Employ skilled and experienced installer to perform cutting for weather exposed and moisture resistant elements, and sight exposed surfaces.
- E. Cut rigid materials using masonry saw or core drill. Pneumatic tools not allowed without prior approval.
1. In general, where cutting, use hand or small power tools designed for sawing or grinding, not hammering and chopping. Cut holes and slots as small as possible, neatly to size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
 2. To avoid marring finished surfaces, cut or drill from the exposed or finished side into concealed surfaces.
- F. Restore work with new products in accordance with requirements of Contract Documents.
- G. Fit work air tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
- H. At penetrations of fire rated walls, partitions, ceiling, or floor construction, completely seal voids with fire rated material , to full thickness of the penetrated element.
- I. Patching:
1. Finish patched surfaces to match finish that existed prior to patching. On continuous surfaces, refinish to nearest intersection or natural break. For an assembly, refinish entire unit.
 2. Match color, texture, and appearance.
 3. Repair patched surfaces that are damaged, lifted, discolored, or showing other imperfections due to patching work. If defects are due to condition of substrate, repair substrate prior to repairing finish.
- J. Perform fitting and adjusting of projects to provide finished installation complying with the specified tolerances and finishes.

3.05 PROGRESS CLEANING

- A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.
- B. Remove debris and rubbish from pipe chases, plenums, attics, crawl spaces, and other closed or remote spaces, prior to enclosing the space.
- C. Broom and vacuum clean interior areas prior to start of surface finishing, and continue cleaning to eliminate dust.
- D. As required preparatory to installation of succeeding materials, clean the structures or pertinent portions thereof to the degree of cleanliness recommended by the manufacturer of the succeeding material, using equipment and materials required to achieve the necessary level of cleanliness.
- E. Collect and remove waste materials, debris, and trash/rubbish from site weekly and dispose off-site; do not burn or bury.
- F. Owner's Right to Clean:
1. If the Contractors fail to clean or persistently fail to clean, the Owner may elect to effect such cleaning using professional cleaning companies as required.
 - a. In such case an appropriate Change Order shall be issued deducting from the payments then or thereafter due the Contractors the cost of such cleaning.

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- b. Each Contractor will be assessed an amount proportionally equal to his share of the total construction cost.
- G. The Westmoreland County Housing Authority shall occupy portions of the facility prior to final completion by the Contractor and acceptance by the Westmoreland County Housing Authority. Responsibilities for interim and final cleaning shall be as determined by the Project Coordinator, as herein above specified and in accordance with the General Conditions of the Contract.

3.06 PROTECTION OF INSTALLED WORK

- A. Protect installed work from damage by construction operations.
- B. Provide special protection where specified in individual specification sections.
- C. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.
- D. Provide protective coverings at walls, projections, jambs, sills, and soffits of openings.
- E. Protect finished floors, stairs, and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects, by protecting with durable sheet materials.
- F. Prohibit traffic or storage upon waterproofed or roofed surfaces. If traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer.
- G. Prohibit traffic from landscaped areas.
- H. Remove protective coverings when no longer needed; reuse or recycle plastic coverings if possible.

3.07 ADJUSTING

- A. Adjust operating products and equipment to ensure smooth and unhindered operation.

3.08 FINAL CLEANING

- A. Execute final cleaning after Substantial Completion but before making final application for payment.
 - 1. Clean areas to be occupied by Westmoreland County Housing Authority prior to final completion before Westmoreland County Housing Authority occupancy.
- B. Use cleaning materials that are nonhazardous.
- C. Remove all labels that are not permanent. Do not paint or otherwise cover fire test labels or nameplates on mechanical and electrical equipment.
- D. Clean debris from roofs, gutters, downspouts, and drainage systems.
- E. Clean site; sweep paved areas, rake clean landscaped surfaces.
- F. Remove waste, surplus materials, trash/rubbish, and construction facilities from the site; dispose of in legal manner; do not burn or bury.

3.09 CLOSEOUT PROCEDURES

- A. Make submittals that are required by governing or other authorities.
 - 1. Provide copies to Canzian/Johnston & Associates, LLC and Westmoreland County Housing Authority.
- B. Notify Canzian/Johnston & Associates, LLC when work is considered ready for Substantial Completion.
- C. Submit written certification that Contract Documents have been reviewed, work has been inspected, and that work is complete in accordance with Contract Documents and ready for Canzian/Johnston & Associates, LLC's review.
 - 1. Preliminary Procedures: Before requesting inspection for certification of Substantial Completion, complete the following. List exceptions in the request.

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- a. In the Application for Payment that coincides with, or first follows, the date Substantial Completion is claimed, show 100 percent completion for the portion of the Work claimed as substantially complete. Include supporting documentation for completion as indicated in these Contract Documents and a statement showing an accounting of changes to the Contract Sum.
 - 1) If 100 percent completion cannot be shown, include a list of incomplete items, the value of the incomplete construction, and reasons the Work is not complete.
 - 2) Inspect all completed work and compile a list of all remedial work needed and corrected work required to comply with all drawings and specified herein (punch list).
 - (a) This list shall be verified and amended by Canzian/Johnston & Associates, LLC during inspection.
- b. Advise Westmoreland County Housing Authority of pending insurance change-over requirements.
- c. Submit specific warranties, workmanship bonds, maintenance agreements, final certifications and similar documents.
- d. Obtain and submit releases enabling Westmoreland County Housing Authority unrestricted use of the Work and access to services and utilities; include occupancy permits, operating certificates and similar releases.
- e. Submit maintenance manuals and final project photographs.
- f. Deliver tools, spare parts, extra stock, and similar items.
- g. Complete start-up testing of systems. Discontinue or change over and remove temporary facilities from the site, along with construction tools, mock-ups, and similar elements.
- h. Complete final clean-up requirements, including touch-up painting. Touch-up and otherwise repair and restore marred exposed finishes.
2. Inspection Procedures: On receipt of a request for inspection, Canzian/Johnston & Associates, LLC will either proceed with inspection or advise the Contractor of unfilled requirements. Canzian/Johnston & Associates, LLC will prepare the Certificate of Substantial Completion following inspection, or advise the Contractor of work that must be completed or corrected before the certificate will be issued.
 - a. Canzian/Johnston & Associates, LLC will repeat inspection when requested and assured that the Work has been substantially completed.
 - b. When Canzian/Johnston & Associates, LLC concurs that the work is substantially complete, he will:
 - 1) Prepare the Certificate of Substantial Completion on AIA Form G704, accompanied by the Contractor's list of items to be completed or corrected, as verified and amended by Canzian/Johnston & Associates, LLC.
 - 2) Submit the Certificate to Westmoreland County Housing Authority and Contractor for their written acceptance of the responsibilities assigned to them in the Certificate.
 - (a) Westmoreland County Housing Authority shall advise the Contractor of all remedial, defective, incomplete or unacceptable work based upon Westmoreland County Housing Authority's own inspection. The results of this inspection shall form the basis of requirements for final acceptance.
- D. Correct items of work listed as incomplete or needing to be corrected and comply with requirements for access to Westmoreland County Housing Authority-occupied areas.
- E. Accompany Project Coordinator on preliminary final inspection.
- F. Notify Canzian/Johnston & Associates, LLC when work is considered finally complete.
 1. Final Inspection Preliminary Procedures: Before requesting final inspection for certification of final acceptance and final payment, complete the following. List exceptions in the request.

- a. Submit the final payment request with releases and supporting documentation not previously submitted and accepted. Include certificates of insurance for products and completed operations where required.
- b. Submit an updated final statement, accounting for final additional changes to the Contract Sum.
 - 1) Indicate all adjustments:
 - (a) The original Contract Sum.
 - (b) Previous change orders (if any).
 - (c) Unit prices (if any).
 - (d) Deductions for uncorrected work.
 - (e) Other adjustments.
 - (f) Total cost of the Work.
 - (g) Previous payments.
 - (h) Sum remaining due.
 - (i) Release of Liens.
 - 2) The Owner will prepare a final Change Order, reflecting approved adjustments to the Contract Sum which were not previously made by Change Orders.
- c. Submit a certified copy of Canzian/Johnston & Associates, LLC's and Westmoreland County Housing Authority's inspection lists of items to be completed or corrected (Punch List), stating that each item has been completed or otherwise resolved for acceptance.
- d. Submit final meter readings for utilities, a measured record of stored fuel, and similar data as of the date of Substantial Completion, or when Westmoreland County Housing Authority took possession of and responsibility for corresponding elements of the Work.
- e. Submit record documents, final maintenance manuals, damage or settlement survey, property survey and similar final record information.
- f. Finalize instruction of Westmoreland County Housing Authority's operating and maintenance personnel.
- g. Submit consent of surety to final payment.
- h. Submit a final liquidated damages settlement statement.
- i. Submit evidence of final, continuing insurance coverage complying with insurance requirements in the General and Supplementary Conditions.
- 2. Reinspection Procedure: Westmoreland County Housing Authority and Canzian/Johnston & Associates, LLC will reinspect the Work upon receipt of notice that the Work, including inspection list items from earlier inspections, has been completed, except items delayed because of circumstances acceptable to Westmoreland County Housing Authority.
 - a. Upon completion and acceptance of reinspection, Westmoreland County Housing Authority will direct Canzian/Johnston & Associates, LLC to prepare a certificate of final acceptance, or Westmoreland County Housing Authority will advise the Contractor of Work that is incomplete or of obligations that have not been fulfilled but are required for final acceptance.
 - b. If necessary, reinspection will be repeated.
- G. Complete items of work determined by Canzian/Johnston & Associates, LLC's final inspection.
- H. Canzian/Johnston & Associates, LLC's Services:
 - 1. Canzian/Johnston & Associates, LLC is expected to make one inspection (by Phase where applicable) for Substantial Completion, and not more than two inspections for Final Completion. Should Canzian/Johnston & Associates, LLC be required to make more inspections due to failure of the Contractor, or Subcontractors, to complete or correct the Work, the Contractor shall bear the cost of Canzian/Johnston & Associates, LLC's additional services as required.

2. Canzian/Johnston & Associates, LLC is expected to review all closeout submissions once. Should the additional services of Canzian/Johnston & Associates, LLC be required to assure that submissions are made properly, the Contractor shall bear the cost of Canzian/Johnston & Associates, LLC's additional services as required.
3. Sums sufficient to pay Canzian/Johnston & Associates, LLC will be deducted by Westmoreland County Housing Authority from the Contract Sum.
4. Canzian/Johnston & Associates, LLC and any consultants shall keep accurate records of time and expenses expended on additional inspections and review of closeout submittals. The Contractor shall be charged a rate of 2.5 times Canzian/Johnston & Associates, LLC's Direct Personnel Expense, 1.25 times the amounts billed to Canzian/Johnston & Associates, LLC by any consultants, and 1.10 times the actual cost of expenses.

END OF SECTION

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**SECTION 01 7800
CLOSEOUT SUBMITTALS**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Project Record Documents.
- B. Operation and Maintenance Data.
- C. Warranties and bonds.

1.02 RELATED REQUIREMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.
- B. Section 00 7200 - HUD 5370 General Conditions: Performance bond and labor and material payment bonds, warranty, and correction of work.
- C. Section 01 3000 - Administrative Requirements: Submittals procedures, shop drawings, product data, and samples.
- D. Section 01 7000 - Execution and Closeout Requirements: Contract closeout procedures.
- E. Individual Product Sections: Specific requirements for operation and maintenance data.
- F. Individual Product Sections: Warranties required for specific products or Work.

1.03 SUBMITTALS

- A. Project Record Documents: Submit documents to Canzian/Johnston & Associates, LLC with claim for final Application for Payment.
 - 1. Canzian/Johnston & Associates, LLC's approval of the current status of Project Record Documents shall be a prerequisite to Canzian/Johnston & Associates, LLC's approval for final payment under the Contract.
- B. Operation and Maintenance Data:
 - 1. Submit two copies of preliminary draft or proposed formats and outlines of contents before start of Work. Canzian/Johnston & Associates, LLC will review draft and return one copy with comments.
 - 2. For equipment, or component parts of equipment put into service during construction and operated by Westmoreland County Housing Authority, submit completed documents within ten days after acceptance.
 - 3. Submit one copy of completed documents 15 days prior to final inspection. This copy will be reviewed and returned after final inspection, with Canzian/Johnston & Associates, LLC comments. Revise content of all document sets as required prior to final submission.
 - 4. Submit two sets of revised final documents in final form within 10 days after final inspection.
- C. Warranties and Bonds:
 - 1. For equipment or component parts of equipment put into service during construction with Westmoreland County Housing Authority's permission, submit documents within 10 days after acceptance.
 - 2. Make other submittals within 10 days after Date of Substantial Completion, prior to final Application for Payment.
 - 3. For items of Work for which acceptance is delayed beyond Date of Substantial Completion, submit within 10 days after acceptance, listing the date of acceptance as the beginning of the warranty period.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 PROJECT RECORD DOCUMENTS

- A. Maintain on site one set of the following record documents; record actual revisions to the Work:
 - 1. Drawings.
 - 2. Specifications.
 - 3. Addenda.
 - 4. Change Orders and other modifications to the Contract.
 - 5. Reviewed shop drawings, product data, and samples.
 - 6. Manufacturer's instruction for assembly, installation, and adjusting.
 - 7. Where digital copies are sought, the Contractor shall sign a waiver supplied by Canzian/Johnston & Associates, LLC.
 - a. Should digital copies be received by the Contractor from the offices of Canzian/Johnston & Associates, LLC, appropriate digital drawings of the Contractor shall be returned in a format chosen by Canzian/Johnston & Associates, LLC as part of the record documents.
- B. Ensure entries are complete and accurate, enabling future reference by Westmoreland County Housing Authority.
- C. Store record documents separate from documents used for construction.
- D. Record information concurrent with construction progress.
- E. Specifications: Legibly mark and record at each product section description of actual products installed, including the following:
 - 1. Manufacturer's name and product model and number.
 - 2. Product substitutions or alternates utilized.
 - 3. Changes made by Addenda and modifications.
- F. Record Drawings and Shop Drawings: Legibly mark each item to record actual construction including:
 - 1. Measured depths of foundations in relation to finish first floor datum.
 - 2. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
 - 3. Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of the Work.
 - 4. Field changes of dimension and detail.
 - 5. Details not on original Contract drawings.
- G. Maintenance of record documents:
 - 1. If the Documents including Drawings have been kept clean during progress of the Work, and if entries thereon have been orderly to the approval of Canzian/Johnston & Associates, LLC, the Documents including Drawings shall be accepted as final Record Documents.
 - 2. If any such Document or Drawing is not so approved by Canzian/Johnston & Associates, LLC, Contractor shall secure a new copy of that Document or Drawing from Canzian/Johnston & Associates, LLC at Canzian/Johnston & Associates, LLC's usual charge for reproduction and handling, and carefully transfer data to the new copy to the approval of Canzian/Johnston & Associates, LLC.

3.02 OPERATION AND MAINTENANCE DATA

- A. For Each Product or System: List names, addresses and telephone numbers of Subcontractors and suppliers, including local source of supplies and replacement parts.
- B. Product Data: Mark each sheet to clearly identify specific products and component parts, and data applicable to installation. Delete inapplicable information.

- C. Drawings: Supplement product data to illustrate relations of component parts of equipment and systems, to show control and flow diagrams. Do not use Project Record Documents as maintenance drawings.
- D. Typed Text: As required to supplement product data. Provide logical sequence of instructions for each procedure, incorporating manufacturer's instructions.

3.03 OPERATION AND MAINTENANCE DATA FOR MATERIALS AND FINISHES

- A. For Each Product, Applied Material, and Finish:
 - 1. Product data, with catalog number, size, composition, and color and texture designations.
- B. Instructions for Care and Maintenance: Manufacturer's recommendations for cleaning agents and methods, precautions against detrimental cleaning agents and methods, and recommended schedule for cleaning and maintenance.
- C. Additional information as specified in individual product specification sections.
- D. Provide a listing in Table of Contents for design data, with tabbed fly sheet and space for insertion of data.

3.04 OPERATION AND MAINTENANCE DATA FOR EQUIPMENT AND SYSTEMS

- A. For Each Item of Equipment and Each System:
 - 1. Description of unit or system, and component parts.
 - 2. Identify function, normal operating characteristics, and limiting conditions.
 - 3. Include performance curves, with engineering data and tests.
 - 4. Complete nomenclature and model number of replaceable parts.
- B. Panelboard Circuit Directories: Provide electrical service characteristics, controls, and communications; typed.
- C. Include color coded wiring diagrams as installed.
- D. Operating Procedures: Include start-up, break-in, and routine normal operating instructions and sequences. Include regulation, control, stopping, shut-down, and emergency instructions. Include summer, winter, and any special operating instructions.
- E. Maintenance Requirements: Include routine procedures and guide for preventative maintenance and trouble shooting; disassembly, repair, and reassembly instructions; and alignment, adjusting, balancing, and checking instructions.
- F. Provide servicing and lubrication schedule, and list of lubricants required.
- G. Include manufacturer's printed operation and maintenance instructions.
- H. Include sequence of operation by controls manufacturer.
- I. Provide original manufacturer's parts list, illustrations, assembly drawings, and diagrams required for maintenance.
- J. Provide Contractor's coordination drawings, with color coded piping diagrams as installed.
- K. Provide charts of valve tag numbers, with location and function of each valve, keyed to flow and control diagrams.
- L. Include test and balancing reports.
- M. Additional Requirements: As specified in individual product specification sections.

3.05 OPERATION AND MAINTENANCE MANUALS

- A. Assemble operation and maintenance data into durable manuals for Westmoreland County Housing Authority's personnel use, with data arranged in the same sequence as, and identified by, the specification sections.
 - 1. Operation and Maintenance Manuals shall be provided as both the hard copies (as indicated herein) and as a digital file on a flash drive; the digital file shall be formatted to be compatible with a PDF reader such as Adobe or BlueBeam.
 - a. The digital file when printed, would replicate the hard copy.

- B. Prepare instructions and data by personnel experienced in maintenance and operation of described products.
- C. Prepare data in the form of an instructional manual.
- D. Binders: Commercial quality, 8-1/2 by 11 inch three D side ring binders with durable plastic covers; 2 inch maximum ring size. When multiple binders are used, correlate data into related consistent groupings.
- E. Cover: Identify each binder with typed or printed title OPERATION AND MAINTENANCE INSTRUCTIONS; identify title of Project; identify subject matter of contents.
- F. Provide tabbed dividers for each separate product and system, with typed description of product and major component parts of equipment.
- G. Text: Manufacturer's printed data, or typewritten data on 20 pound paper.
- H. Drawings: Provide with reinforced punched binder tab. Bind in with text; fold larger drawings to size of text pages.
- I. Arrange content by systems under section numbers and sequence of Table of Contents of this Project Manual.
- J. Contents: Prepare a Table of Contents for each volume, with each product or system description identified, in three parts as follows:
 - 1. Part 1: Directory, listing names, addresses, and telephone numbers of Canzian/Johnston & Associates, LLC, Contractor, Subcontractors, and major equipment suppliers.
 - 2. Part 2: Operation and maintenance instructions, arranged by system and subdivided by specification section. For each category, identify names, addresses, and telephone numbers of Subcontractors and suppliers. Identify the following:
 - a. Significant design criteria.
 - b. List of equipment.
 - c. Parts list for each component.
 - d. Operating instructions.
 - e. Maintenance instructions for equipment and systems.
 - f. Maintenance instructions for special finishes, including recommended cleaning methods and materials, and special precautions identifying detrimental agents.
 - 3. Part 3: Project documents and certificates, including the following:
 - a. Shop drawings and product data.
 - b. Certificates.
 - c. Photocopies of warranties and bonds.
- K. Table of Contents: Provide title of Project; names, addresses, and telephone numbers of Canzian/Johnston & Associates, LLC, Consultants, and Contractor with name of responsible parties; schedule of products and systems, indexed to content of the volume.

3.06 WARRANTIES AND BONDS

- A. Obtain warranties and bonds, executed in duplicate by responsible Subcontractors, suppliers, and manufacturers, within 10 days after completion of the applicable item of work. Except for items put into use with Westmoreland County Housing Authority's permission, leave date of beginning of time of warranty until the Date of Substantial completion is determined.
- B. Additional Requirements for Warranty:
 - 1. When correcting warranted Work that has failed, remove and replace other Work that has been damaged, marred or otherwise compromised as a result of such failure or that must be removed and replaced to provide access for correction of warranted Work.
 - 2. When work covered by a warranty has failed and been corrected by replacement or rebuilding, reinstate the warranty by written endorsement. The reinstated warranty shall be equal to the original warranty with an equitable adjustment for depreciation as determined by Westmoreland County Housing Authority.

3. Upon determination that Work covered by a warranty has failed, replace or rebuild the Work to an acceptable condition complying with requirements of Contract Documents.
The Contractor is responsible for the cost of replacing or rebuilding defective Work regardless of whether Westmoreland County Housing Authority has benefited from use of the Work through a portion of its anticipated useful service life.
 4. Written warranties made to Westmoreland County Housing Authority are in addition to implied warranties, and shall not limit the duties, obligations, rights and remedies otherwise available under the law, nor shall warranty periods be interpreted as limitations on time in which Westmoreland County Housing Authority can enforce such other duties, obligations, rights, or remedies.
 - a. Westmoreland County Housing Authority reserves the right to reject warranties and to limit elections to products with warranties not in conflict with requirements of the Contract Documents.
 5. Westmoreland County Housing Authority reserves the right to refuse to accept Work for the Project where a special warranty, certification, or similar commitment is required on such Work or part of the Work, until evidence is presented that entities required to countersign such commitments are willing to do so.
- C. Verify that documents are in proper form, contain full information, and are notarized.
- D. Co-execute submittals when required.
- E. Retain warranties and bonds until time specified for submittal.
- F. Manual: Bind in commercial quality 8-1/2 by 11 inch three D side ring binders with durable plastic covers.
1. Cover: Identify each binder with typed or printed title WARRANTIES AND BONDS, with title of Project; name, address and telephone number of Contractor and equipment supplier; and name of responsible company principal.
 2. Table of Contents: Neatly typed, in the sequence of the Table of Contents of the Project Manual, with each item identified with the number and title of the specification section in which specified, and the name of product or work item.
 3. Separate each warranty or bond with index tab sheets keyed to the Table of Contents listing. Provide full information, using separate typed sheets as necessary. List Subcontractor, supplier, and manufacturer, with name, address, and telephone number of responsible principal.
 4. When operating and maintenance manuals are required for warranted construction, provide additional copies of each required warranty for inclusion in each required manual.
 - 5.

END OF SECTION

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SECTION 02 4100 DEMOLITION

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Selective demolition of building elements for alteration purposes.
 - 1. Remove completely all existing construction as indicated on the drawings and to the extent required to allow the installation of all new construction.
 - 2. Removal and re-installation of selected items as indicated in the construction documents.

1.02 RELATED REQUIREMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division I Specification Sections, apply to this Section.
- B. Section 01 1000 - Summary: Limitations on use of site and premises.
- C. Section 01 5000 - Temporary Facilities and Controls: Protective barriers, and waste removal.

1.03 REFERENCE STANDARDS

- A. 29 CFR 1926 - U.S. Occupational Safety and Health Standards; current edition.
- B. NFPA 241 - Standard for Safeguarding Construction, Alteration, and Demolition Operations; 2022, with Errata (2021).

1.04 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements for submittal procedures.
- B. Demolition Plan: Submit demolition plan as required by OSHA and local AHJs.
 - 1. Indicate extent of demolition, removal sequencing, bracing and shoring, and location and construction of barricades and fences.
 - a. Locations of temporary partitions, barricades and means of egress elements including but not limited to signage as required by the local code enforcement officer(s).
 - 2. Include a summary of safety procedures including but not limited to the following:
 - a. Health and Safety Plan indicating strategy and schedule for protecting workers from occupation airborne lead exposure. Furnish copy of Plan to workers in areas with potential of disturbing existing paint.
 - 1) Procedures of Health and Safety Plan to comply with OSHA "Lead Exposure in Construction Standards" 29 CFR Part 1926, and include initial exposure monitoring, protection, engineering controls, medical surveillance respiratory protection, employee information and training, and record keeping. Include procedures for proper disposal of hazardous waste.
- C. Photograph or video tape existing conditions of structure surfaces and adjacent improvements that might be misconstrued as damage related to removal operations. File with Westmoreland County Housing Authority's Representative prior to start of work. This item shall be retained permanently by the Westmoreland County Housing Authority.

1.05 QUALITY ASSURANCE

- A. Demolition Firm Qualifications: Company specializing in the type of work required.
 - 1. Minimum of five (5) years of documented experience.
- B. Health and Safety Plan indicating strategy and schedule for protecting workers from occupation airborne lead exposure. Furnish copy of Plan to workers in areas with potential of disturbing existing paint.
 - 1. Procedures of Health and Safety Plan to comply with OSHA "Lead Exposure in Construction Standards" 29 CFR Part 1926, and include initial exposure monitoring, protection, engineering controls, medical surveillance respiratory protection, employee information and training, and record keeping. Include procedures for proper disposal of hazardous waste.

2. Lead paint chip samples have not been collected. The Contractor is solely responsible for all sampling needed to perform work or to verify results in order to insure safety of workers and building occupants.
- C. Westmoreland County Housing Authority assumes no responsibility for actual condition of buildings and building elements to be demolished.
 1. Conditions existing at time of inspection for bidding purpose will be maintained by Westmoreland County Housing Authority as far as practical.
- D. Asbestos: Asbestos sampling has not been performed.
 1. Contractor is solely responsible for additional sampling needed to verify results or to perform work to insure safety of workers and building occupants.
 2. Do not disturb asbestos or any material suspected of containing asbestos except under the procedures specified elsewhere in the Contract Documents.
- E. Contractors Responsibility for Worker Protection for Known and Unknown Environmental Conditions:
 1. Westmoreland County Housing Authority has advised the contractor of any hazards or hazardous conditions known to Westmoreland County Housing Authority which have been identified on this site. Westmoreland County Housing Authority makes no representation that all potential hazards or conditions have been investigated. Materials Contractor may disturb during the course of work on this project may include but not be limited to, plaster, adhesives, dust, dirt, fiberglass, mineral wool, paint or other coatings which may contain chromium, lead, epoxy and/or other resins, silica and/or other materials. There may be environmental conditions present including, but not limited to, deteriorated building materials and/or building contents which may be rotted and/or moldy. There may be mice, rats, bats, birds and/or other vectors and/or their excrement present in areas to be disturbed by the work under this contract.
 2. The nature of Contractor's work may cause worker exposure to conditions for which the Contractor's responsibilities under OSHA and/or other regulations may include providing worker training, appropriate Personal Protective Equipment (PPE), exposure monitoring, and/or the implementation of medical surveillance programs.
 3. One of the qualifications for working on this project is the experience of the Contractor in understanding and dealing with potential workplace exposure to potentially harmful conditions. Any investigation, testing, monitoring, exposure assessment, training, worker protection and/or medical surveillance which may be required for worker protection and/or compliance with any laws, regulations or requirements are the sole responsibility of the Contractor including any costs associated therewith.
- F. Storage or sale of removed items or materials on-site shall not be permitted.
- G. Owner retains the right of first refusal for all salvageable items.
 1. Items indicated to be removed and refused by Westmoreland County Housing Authority whether of salvageable value to Contractor or not shall be removed from the site and structure by the Contractor as work progresses.
 - a. Transport salvaged items from site as they are removed.

PART 2 PRODUCTS -- NOT USED

PART 3 EXECUTION

3.01 DEMOLITION

- A. Demolition activities shall be carefully coordinated with all Contract Documents, Specifications and Drawings.
- B. Remove portions of existing buildings:
 1. See Drawings and drawing legend for graphic representation of items to be demolished.
 2. Remove completely all existing construction as indicated on the drawings and to the extent required to allow the installation of all new construction..
- C. Remove other items indicated to accomplish new work.

3.02 GENERAL PROCEDURES AND PROJECT CONDITIONS

- A. Comply with requirements in Section 01 7000.
- B. Comply with applicable codes and regulations for demolition operations and safety of adjacent structures and the public.
 - 1. Obtain required permits.
 - 2. Obtain additional bonding required by AHJ for items such as roadways.
 - 3. Comply with applicable requirements of NFPA 241.
 - 4. Use of explosives is not permitted.
 - 5. Take precautions to prevent catastrophic or uncontrolled collapse of structures to be removed; do not allow worker or public access within range of potential collapse of unstable structures.
 - 6. Provide, erect, and maintain temporary barriers and security devices.
 - 7. Use physical barriers to prevent access to areas that could be hazardous to workers or the public.
 - 8. Conduct operations to minimize effects on and interference with adjacent structures and occupants.
 - 9. Do not close or obstruct roadways or sidewalks without permits from authority having jurisdiction.
 - 10. Conduct operations to minimize obstruction of public and private entrances and exits. Do not obstruct required exits at any time. Protect persons using entrances and exits from removal operations.
 - 11. Obtain written permission from owners of adjacent properties when demolition equipment will traverse, infringe upon, or limit access to their property.
- C. Do not begin removal until receipt of notification to proceed from Westmoreland County Housing Authority.
- D. Do not begin removal until built elements to be salvaged or relocated have been removed.
- E. Protect existing structures and other elements to remain in place and not removed.
 - 1. Provide bracing and shoring.
 - 2. Prevent movement or settlement of adjacent structures.
 - 3. Stop work immediately if adjacent structures appear to be in danger.
- F. Minimize production of dust due to demolition operations.
- G. Hazardous Materials:
 - 1. If hazardous materials are discovered during removal operations, stop work and notify Canzian/Johnston & Associates, LLC and Westmoreland County Housing Authority; hazardous materials include regulated asbestos containing materials, lead, PCBs, and mercury.
- H. Drain, purge, or otherwise remove, collect, and dispose of chemicals, gases, explosives, acids, flammables, or other dangerous materials before proceeding with demolition operations.
- I. If existing painted surfaces are disturbed, perform work in compliance with OSHA "Lead Construction Standard 29 CFR Part 1926," including initial exposure monitoring, worker protection, engineering controls, employee information and training, medical surveillance, respiratory protection, and record keeping.
 - 1. If debris is generated from disturbance of existing painted surfaces, test debris in accordance with EPA toxicity test to determine proper disposal.

3.03 EXISTING UTILITIES

- A. Coordinate work with utility companies. Notify utilities before starting work, comply with their requirements, and obtain required permits.
- B. Protect existing utilities to remain from damage.
- C. Do not disrupt public utilities without permit from authority having jurisdiction.

- D. Do not close, shut off, or disrupt existing life safety systems that are in use without at least 7 days prior written notification to Westmoreland County Housing Authority.
- E. Do not close, shut off, or disrupt existing utility branches or take-offs that are in use without at least 3 days prior written notification to Westmoreland County Housing Authority.
- F. Locate and mark utilities to remain; mark using highly visible tags or flags, with identification of utility type; protect from damage due to subsequent construction, using substantial barricades if necessary.
- G. Respective Prime Contractors shall remove exposed piping, valves, meters, equipment, supports, and foundations of disconnected and abandoned utilities.

3.04 SELECTIVE DEMOLITION FOR ALTERATIONS

- A. Drawings showing existing construction and utilities are based on casual field observation only.
 - 1. Verify construction and utility arrangements are as indicated.
 - 2. Report discrepancies to Canzian/Johnston & Associates, LLC before disturbing existing installation.
 - 3. Beginning of demolition work constitutes acceptance of existing conditions that would be apparent upon examination prior to starting demolition.
- B. Separate areas in which demolition is being conducted from areas that remain occupied.
 - 1. Provide, erect, and maintain temporary dustproof partitions of construction.
- C. Maintain weatherproof exterior building enclosure, except for interruptions required for replacement or modifications; prevent water and humidity damage.
 - 1. Where openings in exterior enclosure exist, provide construction to make exterior enclosure weatherproof.
 - 2. Provide, erect and maintain temporary weather protection, during interval between demolition and removal of existing construction, on exterior surfaces and new construction to ensure that no water leakage or damage occurs to structure or interior areas.
- D. Remove existing work as indicated and required to accomplish new work.
 - 1. Perform selective demolition work in a systematic manner. Demolish and remove existing construction to the extent required by new construction and as indicated. Use methods required to complete Work within limitations of governing regulations and as follows:
 - a. Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction. To minimize disturbance of adjacent surfaces, use hand or small power tools designed for sawing or grinding, not hammering and chopping. Temporarily cover openings to remain.
 - b. Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
 - c. Do not use cutting torches until work area is cleared of flammable materials. At concealed spaces, such as duct and pipe interiors, verify condition and contents of hidden space before starting flame-cutting operations. Maintain portable fire-suppression devices during flame-cutting operations.
 - d. Maintain adequate ventilation when using cutting torches.
 - e. Locate selective demolition equipment throughout the structure and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
 - f. Dispose of demolished items and materials promptly. On-site storage or sale of removed items is prohibited.
 - g. Return elements of construction and surfaces to remain to condition existing before start of selective demolition operations.
 - 1) Existing surfaces exposed as a result of demolition work shall be patched, repaired and finished by the Contractor performing the selective demolition, unless noted otherwise, such that patching matches existing adjacent construction to remain.

- (a) Finish surfaces shall match existing adjacent finish surfaces.
- 2. Demolish concrete and masonry in small sections. Cut concrete and masonry at junctures with construction to remain using power-driven masonry saw; do not use power-driven impact tools.
- 3. For interior slabs on grade, use removal methods that will not crack or structurally disturb adjacent slabs or partitions. Use power saw where possible.
- 4. If unanticipated mechanical, electrical, structural or hazardous elements conflict with intended demolition, investigate and measure both nature and extent of the conflict. Contractor shall submit a written report to Canzian/Johnston & Associates, LLC and Westmoreland County Housing Authority detailing the extent and nature of the unanticipated conflict. The extent of the respective Contractor's Pre-Bid site investigation(s) shall also comprise part of each written report.
- 5. Remove rotted wood, corroded metals, and deteriorated masonry and concrete; replace with new construction specified.
- 6. Remove items indicated on drawings and within other specification sections.
- 7. Where new surface finishes are to be applied to existing work, perform removals, patch, and prepare existing surfaces as required to receive new finish; remove existing finish if necessary for successful application of new finish.
- 8. Where new surface finishes are not specified or indicated, patch holes and damaged surfaces to match adjacent finished surfaces as closely as possible.
- E. Services (Including but not limited to HVAC, Plumbing, Fire Protection, and Electrical): Remove existing systems and equipment as indicated.
 - 1. Maintain existing active systems that are to remain in operation; maintain access to equipment and operational components; if necessary, modify installation to allow access or provide access panel.
 - a. Provide temporary connections as required to maintain existing systems in service.
 - 2. Where existing active systems serve occupied facilities but are to be replaced with new services, maintain existing systems in service until new systems are complete and ready for service.
 - 3. See Section 01 1000 - SUMMARY for limitations on outages and required notifications.
 - 4. Verify that abandoned services serve only abandoned facilities before removal.
 - 5. Remove abandoned pipe, ducts, conduits, and equipment, including those above accessible ceilings; remove back to source of supply where possible, otherwise cap stub and tag with identification; patch holes left by removal using materials specified for new construction.
- F. Protect existing work to remain.
 - 1. Provide temporary support of work to be cut.
 - 2. Prevent movement of structure; provide shoring and bracing.
 - 3. Perform cutting to accomplish removal work neatly and as specified for cutting new work.
 - 4. Repair adjacent construction and finishes damaged during removal work.
 - 5. Maintain environmental integrity; provide weatherproof closures and weatherproofing.
 - 6. Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.
 - 7. Avoid cutting existing pipe, conduit, or ductwork serving the building until provisions have been made to bypass them.
 - 8. Patch to match new work.
- G. Adapt existing work to fit new work: Make as neat and smooth transition as possible.
- H. Patching: Where the existing surface is not indicated to be refinished, patch to match the surface finish that existed prior to cutting. Where the surface is indicated to be refinished, patch so that the substrate is ready for the new finish.
- I. Cleanup and Repair:

1. Upon completion of selective demolition work, remove tools, equipment, and demolished materials from site. Remove protections and leave interior and exterior areas broom clean.
 - a. All waste materials, debris, and rubbish, including metal trimmings and dropped fasteners shall be removed from paved and landscaped areas by all means necessary, including the use of magnets, at the end of each work day.
2. At completion of indicated selective demolition work, General Contractor shall examine all walls and floors for penetrations and install firestopping material.
3. Sweep the building broom clean on completion of selective demolition operation.

3.05 DEBRIS AND WASTE REMOVAL

- A. Remove debris, junk, and trash from site.
 1. Promptly dispose of demolished materials; do not allow demolished materials to accumulate on site.
 2. Transport demolished materials off site and legally dispose of them.
 3. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
 4. Demolished materials shall not be used for fill with the exception of those noted above.
- B. Remove from site all materials not to be reused on site; do not burn or bury.
- C. Leave site in clean condition, ready for subsequent work.
 1. Clean adjacent buildings and improvements of dust, dirt, and debris caused by demolition operations.
- D. Clean up spillage and wind-blown debris from public and private lands.

END OF SECTION

**SECTION 04 0100
MAINTENANCE OF MASONRY**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Repointing mortar joints.
- B. Repair of damaged masonry.
- C. Rebuilding masonry.

1.02 RELATED REQUIREMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division I Specification Sections, apply to this Section.
- B. Section 04 0511 - Masonry Mortaring and Grout.
- C. Section 04 2000 - Unit Masonry: Brick masonry units.

1.03 REFERENCE STANDARDS

- A. TMS 402/602 - Building Code Requirements and Specification for Masonry Structures; 2022, with Errata (2024).

1.04 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Shop Drawings: Indicate special supports for the work. Detail shoring.
- C. Samples: Submit four samples of face brick units to illustrate matching color, texture and extremes of color range.

1.05 MOCK-UPS

- A. Restore and repoint an existing masonry wall area sized 8 feet long by 6 feet high; include in mock-up area instances of mortar, accessories, and wall openings.
- B. Acceptable panel and procedures employed will become the standard for work of this section.
- C. Mock-up may remain as part of the Work.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Deliver masonry neatly stacked and tied on pallets. Store clear of ground with adequate waterproof covering.

1.07 FIELD CONDITIONS - MASONRY WORK

- A. Cold and Hot Weather Requirements: Comply with requirements of TMS 402/602 or applicable building code, whichever is more stringent.

PART 2 PRODUCTS

2.01 MORTAR MATERIALS

- A. Comply with requirements of Section 04 0511.

2.02 MASONRY MATERIALS

- A. Brick: Section 04 2000.

PART 3 EXECUTION

3.01 PREPARATION

- A. Protect surrounding elements from damage due to restoration procedures.
- B. Carefully remove and store removable items located in areas to be restored, including fixtures, fittings, finish hardware, and accessories; reinstall upon completion.
- C. Separate areas to be protected from restoration areas using means adequate to prevent damage.

- D. Mask immediately adjacent surfaces with material that will withstand restoration procedures.
- E. Close off adjacent occupied areas with dust proof and weatherproof partitions.

3.02 REBUILDING

- A. Cut out masonry with care in a manner to prevent damage to any adjacent remaining materials.
- B. Support structure as necessary in advance of cutting out units.
- C. Cut away loose or unsound adjoining masonry to provide firm and solid bearing for new work.
- D. Build in new units following procedures for new work specified in other section(s) and/or indicated on drawings.
- E. Mortar Mix: Colored and proportioned to match existing work.
- F. Ensure that anchors are correctly located and built in.
- G. Install built in masonry work to match and align with existing, with joints and coursing true and level, faces plumb and in line. Build in all openings, accessories and fittings.

3.03 REPOINTING

- A. Cut out loose or disintegrated mortar in joints to minimum 1/2 inch depth or until sound mortar is reached.
- B. Use power tools only after test cuts determine no damage to masonry units will result.
- C. Do not damage masonry units.
- D. When cutting is complete, remove dust and loose material by brushing.
- E. Premoisten joint and apply mortar. Pack tightly in maximum 1/4 inch layers. Form a smooth, compact concave joint to match existing.
- F. Moist cure for 72 hours.

3.04 CLEANING

- A. Remove excess mortar, smears, and droppings as work proceeds and upon completion.
- B. Clean surrounding surfaces.

END OF SECTION

SECTION 04 0300.13
CONSERVATION TREATMENT FOR PERIOD MASONRY - LIMESTONE

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Replacement of existing masonry units.
- B. Repair of damaged existing masonry.
- C. Raking and repointing of existing mortar joints.

1.02 RELATED REQUIREMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division I Specification Sections, apply to this Section.
- B. Section 01 3591 - Period Treatment Procedures for general historic preservation project requirements.
- C. Section 04 0300.23 - Conservation Treatment for Period Masonry - Repointing Granite.

1.03 REFERENCE STANDARDS

- A. ASTM C144 - Standard Specification for Aggregate for Masonry Mortar; 2025.
- B. ASTM C150/C150M - Standard Specification for Portland Cement; 2015.
- C. ASTM C207 - Standard Specification for Hydrated Lime for Masonry Purposes; 2024.
- D. ASTM C270 - Standard Specification for Mortar for Unit Masonry; 2014a.

1.04 ADMINISTRATIVE REQUIREMENTS

- A. Preinstallation Meeting: Convene one week prior to commencing work of this section.
 - 1. Require attendance of parties directly affecting work of this section.
 - 2. Review installation conditions, procedures, and coordination with related work.

1.05 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements for submittal procedures.
- B. Repointing Schedule: Detailed schedule of areas to be repointed, including assessment of the problem areas and detailed description of repointing procedures. Include the following:
 - 1. Description of existing general masonry failures that contribute to mortar losses and scheduling for repairs prior to repointing.
 - 2. Results of analysis of existing and repair mortar types and colors.
 - 3. 'Before' photos of areas to be repointed.
- C. Samples: Submit four samples of stone units to show matching color, texture, and extremes of color range.
- D. Conservation treatment quality control plan.
- E. Restorer's qualification statement.

1.06 QUALITY ASSURANCE

- A. Conservation Treatment Quality Control Plan: Prior to commencing work of this section, receive written approval of plan of proposed masonry restoration and cleaning work. Include the following:
 - 1. Description protection of surrounding construction.
 - 2. Description of sequencing, work procedures, materials, and tools proposed for each conservation treatment.
 - 3. Survey of original wall layout and datum points and plumb lines for rebuilding masonry.
 - 4. Description of shoring and providing safe working environment.
 - 5. Description of removal of deteriorated mortar joint.
 - 6. Description of matching of repair material and compatibility with historic materials.
 - 7. Description of periodic and final cleaning of masonry surfaces.

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8. Description of masonry removal and matching procedures including, but not limited to, equipment, approach, length of time the masonry will be out of the wall, mapping removal locations, and location where masonry units will be repaired, on-site or off-site.
- B. Restorer Qualifications: Company specializing in period masonry restoration with minimum seven (7) years of documented experience.
 1. Use experienced masons who have demonstrated proficiency with tools on historic structures.

1.07 MOCK-UPS

- A. See Section 01 4000 - Quality Requirements for additional requirements.
- B. Raking of Mortar Joints: Prior to raking out all areas, cut back joints at location selected by Westmoreland County Housing Authority using the methods that will be employed in the work. Raking will continue at no additional cost to Westmoreland County Housing Authority until an acceptable sample is achieved. This area will serve as standard for joint raking for the entire job. Mark area with non-marking tape and leave upointed until all other pointing is complete. Point only when directed by Westmoreland County Housing Authority.
- C. Restore and repoint existing masonry wall defined as follows and on drawings. Include mortar and accessories.
 1. Repointing Mortar Joints:
 - a. Minimum Dimensions: 12 feet long; 2/3 of length for horizontal joints and 1/3 of length for vertical joints.
 - b. Demonstrate cutting out mortar joints, preparation for repointing, and mixing, installing, and curing mortar.
 2. Masonry Removal and Replacement: Remove masonry and replace to match existing dimensions and texture, unless indicated otherwise. Size shall represent typical conditions.
 - a. Set one masonry unit in same location; match joint width and bond pattern, using mortar specified.
 3. Application of Repair Materials:
 - a. Patching: Apply repair material on minimum two masonry units of type scheduled for repair.
 - 1) Demonstrate removal of previous patching and application of new patching on one masonry unit.
 - b. Modified Full Dutchman: Provide dutchman repairs in two locations, include one that is only cut and prepared for application. Demonstrate qualities of stone insert and workmanship and techniques in dutchman repairs. Do not proceed with other dutchman repairs until repair has been approved by Canzian/Johnston & Associates, LLC.
 4. New Masonry Elements: Install one of each type of new component, demonstrating final installation method and finished appearance.
- D. Locate mock-up areas where directed.
- E. Approved restoration mock-up areas, including results of procedures employed, will remain and become the quality standard for work of this section.

1.08 FIELD CONDITIONS

- A. Maintain materials and surrounding air temperature to minimum 40 degrees F prior to, during, and 48 hours after completion of masonry work.
- B. Maintain materials and surrounding air temperature to maximum 90 degrees F prior to, during, and 48 hours after completion of masonry work.

PART 2 PRODUCTS

2.01 MORTAR MATERIALS

- A. Hydrated Lime: ASTM C207, Type S.

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- B. Portland Cement: ASTM C150/C150M, Type I, White.
 - 1. Not more than 0.60 percent alkali.
 - 2. Not more than 0.15 percent soluble alkali.
 - 3. Gray mortar shall be permitted on if a dark mortar is being matched.
- C. Water: Clean and free of oils, acids, alkalies, salts, organic materials, or other substances that are deleterious to mortar or metal it comes in contact with.
 - 1. Water dispensed from a container must not be contaminated by the container's chemical make up.
- D. Sand: ASTM C144.
 - 1. Sand color, size, and texture should match the original as closely as possible.
 - 2. Use bar san or beach sand rather than curshed sand for repointing mortar. Bar sand or beach sand shall be thoroughly washed to remove salts and impurities prior to use.
 - a. Working characteristics of mortar made with crushed sand may be improved by adding a slight amount of portland cement. The amount of cement should be determined by experimentation, but should not exceed 20 percent of the total lime/cement binder.
- E. Stone dust finely ground fromt he same stone as that to be repointed.
- F. Additives: NO antifreeze compounds or other admixtures shall be used.
- G. Mortar Mixing:
 - 1. General Requirements:
 - a. Do not use modern additives unless permitted in writing by Canzian/Johnston & Associates, LLC.
 - b. Have the eixisting mortar completely analyzed to insure that the repointing mortar will not be less permeable/harder than the masonry units or the original mortar.
 - c. Match the historic mortar in color, texture, and tooling.
 - d. Color and Texture: Repointing mortar shall match as closely as possible the original mort in color, teture and physical characteristics.
 - 1) Use sand which is similar to the original in color and gradation. Multiple sources of sand shall be utilized to achieve mix of sands similar to the original mix of sands.
 - 2) Use finely ground stone "dust" in the mortar to match the jointst as closely as possible.
 - 3) Special mortar pigments shall be used only if naturally occuring sands are not capable of producing a color match to the original mortar.
 - 4) Impurities within the original mortar mix shall be included in the new mortar; impurities consist of incompletely burned or ground lime, ground oyster shells, animal hairs, etc.
 - e. Exterior Mortar Proportions: Subject to analysis of existing mortar these proportions will change. Costs for varying proportions shall be anticipated and included in the Base Bid.
 - 1) For historic masonry set in lime mortar:
 - (a) Portland Cement: 1 part by volume
 - (b) Lime: 3 part by volume
 - (c) Sand: 8-12 parts by volume
 - (1) Exact mix will relate to the grain size and sharpness of the sand and will vary depending upon the supply.
 - (d) Water: to form a workable consistency
 - 2) For historic masonry set in standard mortar, use the following mortar mix (ASTM C270, Type "O") as a starting point.
 - (a) Portland Cement: 1 part by volume
 - (b) Lime or Lime Putty: 2 part by volume
 - (c) Sand and Stone dust: 6-9 parts by volume

- (1) Exact mix will relate to the grain size and sharpness of the sand and will vary depending upon the supply.
 - (d) Water: to form a workable consistency
 - 3) For Limestone, use the following mortar mix (ASTM C270, Type "N") as a starting point.
 - (a) Portland Cement: 1 part by volume
 - (b) Lime: 1 part by volume
 - (c) Aggregate: 4-6 parts by volume
 - (1) Exact mix will relate to the grain size and sharpness of the sand and will vary depending upon the supply.
 - (d) Water: to form a workable consistency
 - (e)
 - f. Mix a final "job-size" batch once the correct sand color, cement content, etc. have been determined through small tests to ensure that the on-site mixing conditions will result in the same final product.
 - g. Mixing Procedures:
 - 1) Measure materials by volume or equivalent weight.
 - 2) Do not measure by shovel. Use known measure.
 - 3) Mix ingredients in clean mechanical batcher.
 - 4) Let mortar sit for 20 minutes prior to use to allow for initial shrinkage.
 - 5) Use mortar within 1 hour of initial mixing.
- 2. Mortar for Stone:
 - a. Use lime and sand mortars with compressive strength approximately 1/3 of compressive or crushing strength of stone units.

2.02 MASONRY UNIT MATERIALS

- A. Replacement Stone: Match existing historic stone elements' grade, type, color, shape, size, texture, finish profile, and general appearance.

2.03 STONE PATCHING MATERIALS

- A. Fine-Grained Stone: Products and materials designed for patching fine-grained natural stone, including granite, marble, and honed-finish limestone.
 - 1. General: Single component, cementitious, mineral-based mortar designed specifically for the restoration of natural stone. Formulation must result in final restoration being vapor permeable an any depth and containing no latex or acrylic bonding agents or additives.
 - 2. Color and Texture: Matching original stone.
 - 3. Basis of Design: Jahn M70 as manufactured or approved for use by Cathedral Stone Products, Inc. (www.cathedralstone.com) and the terminology used may include reference to proprietary products of that company.
 - a. The various materials and products specified in the specifications by name or description are given to establish a standard of quality of workmanship and materials to be provided under this Section. It is not the intent to limit the bidder, the bid or the evaluation of the bid to any one material or product specified but rather to describe the minimum standard. A bid containing an alternative which does not meet the specifications will be declared non-responsive.
 - b. Other Acceptable Manufacturers:
 - c. Substitutions: See Section 01 6000 - Product Requirements.

2.04 BONDING ADHESIVES

- A. Epoxy Anchor Grout: 100 percent solids, moisture-insensitive, low-creep structural adhesive complying with ASTM C881/C881M, Type IV; grade and class selected to comply with manufacturer's recommendations for the application.
 - 1. Application: For bonding anchors to masonry.

2.05 ACCESSORY MATERIALS

- A. Reinforcement/Anchors: Stainless Steel typ 302/304
 - 1. Rods: Threaded, 3/8 inch diameter
- B. Mortar Additives: Matching project's existing historic mortars including components to enhance color and texture. Admixtures are not permitted.
- C. Colorants, When Required for Exact Color Match: Nonfading, mineral oxide masonry pigment as approved by the Canzian/Johnston & Associates, LLC.
 - 1. Pigments: Maximum 2 percent by weight of binder in the mix.

PART 3 EXECUTION

3.01 PERIOD TREATMENT, GENERAL

- A. See Section 01 3591 for special procedure requirements related to elements and features of historical significance and value.

3.02 EXAMINATION

- A. Verify that surfaces to be cleaned and restored are ready for work of this section.

3.03 EVALUATION AND ASSESSMENT

- A. Begin masonry work after evaluation and analysis of areas to be repaired are completed including, but not limited to, sampling and testing of the existing mortar to determine its composition and qualities.
- B. Do not start repairs until conditions causing masonry deterioration have been identified.
- C. Analyze composition of existing historic bedding and pointing mortar to provide basis for matching with new mortar.

3.04 PREPARATION

- A. Protect other elements from damage that may result from restoration procedures.
- B. Carefully remove and store identified items located in areas to be restored including, but not limited to, fixtures, fittings, finish hardware, and accessories; reinstall upon completion of restoration work.
- C. Protect nonrestoration areas from restoration areas to prevent damage.
- D. Mask or cover adjacent surfaces and permanent equipment. Secure coverings without using nails and without tape that leaves residue. Do not use impervious sheeting which produces condensation.
 - 1. Use materials that will withstand cleaning and restoration procedures.
- E. When using liquid cleaning methods, provide drainage devices to prevent runoff over adjacent surfaces, unless those surfaces are impervious to damage from runoff.
- F. Do not allow cleaning runoff to drain into sanitary or storm sewers.

3.05 INSTALLATION

- A. Do not mix or apply materials when the ambient temperature or humidity are outside of range recommended by their manufacturers.
- B. Schedule conservation treatments to be carried out during appropriate environmental conditions to avoid weather-related failures.

3.06 REPAIR

- A. Stone Masonry Unit Patching: Patch units within areas indicated on Drawings.
 - 1. Patching:
 - a. Mask off areas to be kept free of compound.
 - b. Mix and apply patching mortar in accordance with manufacturer's printed recommendations.

- c. Apply and finish patching mortar to match and align with existing stone including color, texture and profiles.

3.07 MASONRY UNIT REPLACEMENT

- A. Cut out damaged and deteriorated masonry to prevent damage to adjacent materials.
- B. Support structure as necessary prior to cutting out units.
- C. Cut away loose or unsound, adjoining masonry to provide firm and solid bearing for new work.
- D. Build in new units for new work as specified in other sections.
- E. Mortar Mix: Color and proportion to match existing.
- F. Ensure that anchors are correctly located and built in.
- G. Install built-in masonry work to match and align with existing, with joints and coursing true and level, faces plumb and in line. Build-in all openings, accessories, and fittings.

3.08 REPOINTING

- A. Clean all mortar from surfaces within the joint or crack so that the new pointing mortar bonds to the building material, not old mortar. Do not chip or spall edges of the stone. More than one chip per square yard will be unacceptable. If work is found unacceptable, all raking will cease without additional cost to Westmoreland County Housing Authority until deficiencies in tools, workers, or methodologies have been corrected to Westmoreland County Housing Authority's satisfaction.
- B. Cut out loose or disintegrated mortar in joints to minimum 1/2-inch depth or until sound mortar is reached.
- C. Use hand tools only. Do not use power tools.
- D. Exercise appropriate caution to prevent damage to existing masonry.
- E. When cutting is complete, remove dust and loose material by brushing, vacuuming or flushing joints.
- F. Reduce initial absorption of the stone by thoroughly wetting stone surface with clean water just prior to repointing. Do not allow water to pool on surface of the stone.
- G. Pack joints with mortar tightly, leaving no voids, in maximum 1/4-inch layers. Apply succeeding layers only after preceding layer has taken initial set.
- H. Use clean tools and equipment free from hardened or partially set mortar.
- I. Clean excess mortar from stone joints, removing splashed mortar and droppings immediately.
- J. Do not retemper or use mortar which has partially set, is caked, or is lumpy
- K. Tool and form a smooth, compact, and dense joint to match existing joint profile. Do not allow mortar to extend over the stone surface.
- L. Moist cure for 72 hours.

3.09 CLEANING

- A. Remove stains, efflorescence, or other excess resulting from the work of this section. Do without delay to avoid penetration and setting.
- B. Remove excess mortar, smears, and droppings as work proceeds and upon completion.
- C. Use only tools and equipment which are clean and free of hardened or partially hardened material.
- D. Clean stone only with fiber bristle brushes and water. Do not use acids, detergents, or other cleaning agents.
- E. Clean surrounding surfaces.

END OF SECTION

SECTION 04 0300.23
CONSERVATION TREATMENT FOR PERIOD MASONRY - REPOINTING GRANITE

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Raking and repointing of existing mortar joints.

1.02 RELATED REQUIREMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division I Specification Sections, apply to this Section.
- B. Section 01 3591 - Period Treatment Procedures for general historic preservation project requirements.

1.03 REFERENCE STANDARDS

- A. ASTM C144 - Standard Specification for Aggregate for Masonry Mortar; 2025.
- B. ASTM C150/C150M - Standard Specification for Portland Cement; 2015.
- C. ASTM C207 - Standard Specification for Hydrated Lime for Masonry Purposes; 2024.

1.04 ADMINISTRATIVE REQUIREMENTS

- A. Preinstallation Meeting: Convene one week prior to commencing work of this section.
 - 1. Require attendance of parties directly affecting work of this section.
 - 2. Review installation conditions, procedures, and coordination with related work.

1.05 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements for submittal procedures.
- B. Repointing Schedule: Detailed schedule of areas to be repointed, including assessment of the problem areas and detailed description of repointing procedures. Include the following:
 - 1. Description of existing general masonry failures that contribute to mortar losses and scheduling for repairs prior to repointing.
 - 2. Results of analysis of existing and repair mortar types and colors.
 - 3. 'Before' photos of areas to be repointed.
- C. Conservation treatment quality control plan.
- D. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.
- E. Restorer's qualification statement.

1.06 QUALITY ASSURANCE

- A. Conservation Treatment Quality Control Plan: Prior to commencing work of this section, receive written approval of plan of proposed masonry restoration and cleaning work. Include the following:
 - 1. Description of dust containment methods.
 - 2. Description protection of surrounding construction and landscaping.
 - 3. Description of sequencing, work procedures, materials, and tools proposed for each conservation treatment.
 - 4. Description of removal of deteriorated mortar joint.
 - 5. Description of matching of repair material and compatibility with historic materials.
 - 6. Description of periodic and final cleaning of masonry surfaces.
- B. Restorer Qualifications: Company specializing in period masonry restoration with minimum seven (7) years of documented experience.
 - 1. Use experienced masons who have demonstrated proficiency with tools on historic structures.

1.07 MOCK-UPS

- A. See Section 01 4000 - Quality Requirements for additional requirements.

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- B. Raking of Mortar Joints: Prior to raking out all areas, cut back joints at location selected by Westmoreland County Housing Authority using the methods that will be employed in the work. Raking will continue at no additional cost to Westmoreland County Housing Authority until an acceptable sample is achieved. This area will serve as standard for joint raking for the entire job. Mark area with non-marking tape and leave upointed until all other pointing is complete. Point only when directed by Westmoreland County Housing Authority.
- C. Repointing Mortar Joints:
 - 1. Minimum Dimensions: 12 feet long; 2/3 of length for horizontal joints and 1/3 of length for vertical joints.
 - 2. Demonstrate cutting out mortar joints, preparation for repointing, and mixing, installing, and curing mortar.
- D. Locate mock-up areas where directed.
- E. Approved restoration mock-up areas, including results of procedures employed, will remain and become the quality standard for work of this section.

1.08 FIELD CONDITIONS

PART 2 PRODUCTS

2.01 MORTAR MATERIALS

- A. Hydrated Lime: ASTM C207, Type S.
- B. Portland Cement: ASTM C150/C150M, Type I; color required to match approved color sample.
- C. Water: Clean and free of oils, acids, alkalies, salts, organic materials, or other substances that are deleterious to mortar or metal it comes in contact with.
- D. Sand: ASTM C144.
- E. Mortar Mixing:
 - 1. General Requirements:
 - a. Do not use modern additives unless permitted in writing by Canzian/Johnston & Associates, LLC.
 - b. Exterior Mortar Proportions: Subject to analysis of existing mortar these proportions will change. Costs for varying proportions shall be anticipated and included in the Base Bid.
 - 1) Portland Cement: 1 part by volume
 - 2) Lime: 1 part by volume
 - 3) Aggregate: 3 parts by volume
 - 4) Water: to form a workable consistency
 - c. Match the historic mortar in color, texture, and tooling.
 - d. Provide mortar with greater vapor permeability and lower compressive strength than the masonry units.
 - 2. Mixing Procedures:
 - a. Measure materials by volume or equivalent weight.
 - b. Do not measure by shovel. Use known measure.
 - c. Mix ingredients in clean mechanical batcher.
 - d. Let mortar sit for 20 minutes prior to use to allow for initial shrinkage.
 - e. Use mortar within 1 hour of initial mixing.

2.02 ACCESSORY MATERIALS

- A. Mortar Additives: Matching project's existing historic mortars including components to enhance color and texture.
- B. Colorants, When Required for Exact Color Match: Nonfading, mineral oxide masonry pigment as approved by the Canzian/Johnston & Associates, LLC.
 - 1. Pigments: Maximum 10 percent by weight of binder in the mix.
 - 2. Carbon Black: Maximum 2 percent of binder in the mix.

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PART 3 EXECUTION

3.01 PERIOD TREATMENT, GENERAL

- A. See Section 01 3591 for special procedure requirements related to elements and features of historical significance and value.

3.02 EVALUATION AND ASSESSMENT

- A. Begin masonry work after evaluation and analysis of areas to be repaired are completed including, but not limited to, sampling and testing of the existing mortar to determine its composition and qualities.
- B. Do not start repairs until conditions causing masonry deterioration have been identified.
- C. Analyze composition of existing historic bedding and pointing mortar to provide basis for matching with new mortar.

3.03 PREPARATION

- A. Protect other elements from damage that may result from restoration procedures.
- B. Carefully remove and store identified items located in areas to be restored including, but not limited to, fixtures, fittings, finish hardware, and accessories; reinstall upon completion of restoration work.
- C. Protect nonrestoration areas from restoration areas to prevent damage.
- D. Mask or cover adjacent surfaces and permanent equipment. Secure coverings without using nails and without tape that leaves residue. Do not use impervious sheeting which produces condensation.
 - 1. Use materials that will withstand cleaning and restoration procedures.
- E. When using liquid cleaning methods, provide drainage devices to prevent runoff over adjacent surfaces, unless those surfaces are impervious to damage from runoff.
- F. Do not allow cleaning runoff to drain into sanitary or storm sewers.

3.04 INSTALLATION

- A. Do not mix or apply materials when the ambient temperature or humidity are outside of range recommended by their manufacturers.
- B. Schedule conservation treatments to be carried out during appropriate environmental conditions to avoid weather-related failures.

3.05 REPOINTING

- A. Clean all mortar from surfaces within the joint or crack so that the new pointing mortar bonds to the building material, not old mortar. Do not chip or spall edges of the stone. More than one chip per square yard will be unacceptable. If work is found unacceptable, all raking will cease without additional cost to Westmoreland County Housing Authority until deficiencies in tools, workers, or methodologies have been corrected to Westmoreland County Housing Authority's satisfaction.
- B. Joint depth to be minimum 3/4-inch depth but in all cases rake back to expose sound mortar.
- C. Rake out all stone joints in designated areas by hand using a chisel no wider than 3/4 (three fourths) joint width. Remove all un-required metal fasteners from granite and granite joints.
 - 1. Use hand tools only. Do not use power tools.
- D. Exercise appropriate caution to prevent damage to existing masonry.
- E. When cutting is complete, remove dust, dirt and loose material by brushing, vacuuming or flushing joints.
- F. Reduce initial absorption of the stone by thoroughly wetting stone surface with clean water just prior to repointing. Do not allow water to pool on surface of the stone.

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- G. Pack joints with mortar tightly, leaving no voids, in maximum 1/4-inch layers. Apply succeeding layers only after preceeding layer has taken initial set.
- H. Use clean tools and equipment free from hardened or partially set mortar.
- I. Clean excess mortar from stone joints, removing splashed mortar and droppings immediately.
- J. Do not retemper or use mortar which has partially set, is caked, or is lumpy
- K. Tool and form a smooth, compact, and dense joint to match existing joint profile. Do not allow mortar to extend over the stone surface.
- L. Moist cure for 72 hours.
 - 1. Keep joint damp (90 percent RH).
 - 2. Protect joints from rapid drying due to wind.

3.06 CLEANING

- A. Remove stains, efflorescence, or other excess resulting from the work of this section. Do without delay to avoid penetration and setting.
- B. Remove excess mortar, smears, and droppings as work proceeds and upon completion.
- C. Use only tools and equipment which are clean and free of hardened or partially hardened material.
- D. Clean stone only with fiber bristle brushes and water. Do not use acids, detergents, or other cleaning agents.
- E. Clean surrounding surfaces.

END OF SECTION

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**SECTION 04 0511
MASONRY MORTARING AND GROUT**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Mortar for masonry.

1.02 RELATED REQUIREMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.
- B. Section 04 2000 - Unit Masonry: Installation of mortar and grout.

1.03 REFERENCE STANDARDS

- A. TMS 402/602 - Building Code Requirements and Specification for Masonry Structures; 2022, with Errata (2024).
- B. ASTM C5 - Standard Specification for Quicklime for Structural Purposes; 2024.
- C. ASTM C91/C91M - Standard Specification for Masonry Cement; 2012.
- D. ASTM C144 - Standard Specification for Aggregate for Masonry Mortar; 2025.
- E. ASTM C150/C150M - Standard Specification for Portland Cement; 2015.
- F. ASTM C207 - Standard Specification for Hydrated Lime for Masonry Purposes; 2024.
- G. ASTM C270 - Standard Specification for Mortar for Unit Masonry; 2014a.
- H. ASTM C404 - Standard Specification for Aggregates for Masonry Grout; 2011.
- I. ASTM C476 - Standard Specification for Grout for Masonry; 2010.
- J. ASTM C1314 - Standard Test Method for Compressive Strength of Masonry Prisms; 2014.

1.04 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Product Data: Include design mix and indicate whether the Proportion or Property specification of ASTM C270 is to be used.
- C. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.
- D. Manufacturer's Installation Instructions: Submit packaged dry mortar manufacturer's installation instructions.

1.05 QUALITY ASSURANCE

- A. Comply with provisions of TMS 402/602, except where exceeded by requirements of the contract documents.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Maintain packaged materials clean, dry, and protected against dampness, freezing, and foreign matter.

1.07 FIELD CONDITIONS

- A. Cold and Hot Weather Requirements: Comply with requirements of TMS 402/602 or applicable building code, whichever is more stringent.
 - 1. The temperature of newly laid masonry and newly grouted masonry shall be maintained above 32 degrees F for a minimum of 24 hours.

PART 2 - PRODUCTS

2.01 MORTAR AND GROUT APPLICATIONS

- A. At Contractor's option, mortar and grout may be field-mixed from packaged dry materials, made from factory premixed dry materials with addition of water only, or ready-mixed.

- B. Mortar Color: A total of one (1) mortar color(s) shall be selected.
 - 1. Mortar color shall be selected to match as closely as possible the existing mortar.
 - 2. Where mortar joints will receive a coating, Section 09 9723 - Concrete and Masonry Coatings, gray mortar may be utilized.
- C. Mortar Mix Designs: ASTM C270, Property Specification.
 - 1. Exterior Brick Veneer: Type O.
 - 2. Exterior Repointing Mortar: Type O.

2.02 MATERIALS

- A. Packaged Dry Material for Mortar for Unit Masonry: Premixed Portland cement, hydrated lime, and sand; complying with ASTM C387/C387M and capable of producing mortar of the specified strength in accordance with ASTM C270 with the addition of water only.
 - 1. Type: Types as scheduled in this section.
- B. Packaged Dry Material for Grout for Masonry: Premixed cementitious materials and dried aggregates; capable of producing grout of the specified strength in accordance with ASTM C476 with the addition of water only.
 - 1. Type: Fine.
- C. Portland Cement: ASTM C150/C150M.
 - 1. Type: Type I - Normal; ASTM C150/C150M.
- D. Hydrated Lime: ASTM C207, Type S.
- E. Quicklime: ASTM C5, non-hydraulic type.
- F. Mortar Aggregate: ASTM C144.
- G. Grout Aggregate: ASTM C404.
 - 1. Maximum aggregate size shall be 3/8-inch.
- H. Water: Clean and potable.
- I. Admixtures: Do not use without prior written acceptance by the Architect.
 - 1. Request shall include:
 - a. Reason for request.
 - b. Product name and manufacturer.
 - c. Complete description of properties.
 - d. Mortar mix design in which admixture is proposed to be used.
 - e. Location of mortar to which admixture is proposed to be added.

2.03 MORTAR MIXING

- A. Thoroughly mix mortar ingredients using mechanical batch mixer, in accordance with ASTM C270 and in quantities needed for immediate use.
- B. Maintain sand uniformly damp immediately before the mixing process.
- C. Add admixtures, where prior approval has been granted, in accordance with manufacturer's instructions. Provide uniformity of mix and coloration.
- D. Do not use anti-freeze compounds to lower the freezing point of mortar.
- E. If water is lost by evaporation, re-temper only within two hours of mixing.

PART 3 EXECUTION

3.01 INSTALLATION

- A. Install mortar to requirements of section(s) in which masonry is specified.

**SECTION 04 2000
UNIT MASONRY**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Concrete block.
- B. Concrete building brick.
- C. Clay facing brick.
- D. Flashings.
- E. Accessories.

1.02 RELATED REQUIREMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division I Specification Sections, apply to this Section.
- B. Section 04 0100 - Maintenance of Masonry.
- C. Section 04 0511 - Masonry Mortaring and Grout.
- D. Section 05 5000 - Metal Fabrications: Steel shelf angle.
- E. Section 07 9200 - Joint Sealants: Sealing control and expansion joints.

1.03 REFERENCE STANDARDS

- A. ASTM A153/A153M - Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware; 2009.
- B. ASTM A666/A666M - Standard Specification for Annealed or Cold-Worked Austenitic Stainless Steel Sheet, Strip, Plate, and Flat Bar; 2024.
- C. ASTM C55 - Standard Specification for Concrete Building Brick; 2011.
- D. ASTM C90 - Standard Specification for Dry-Cast Loadbearing Concrete Masonry Units; 2024a.
- E. ASTM C216 - Standard Specification for Facing Brick (Solid Masonry Units Made from Clay or Shale); 2024.
- F. BIA Technical Notes No. 13 - Ceramic Glazed Brick Exterior Walls; 2017.
- G. COE CRD-C 48 - Method of Test for Water Permeability of Concrete; 1992.
- H. TMS 402/602 - Building Code Requirements and Specification for Masonry Structures; 2022, with Errata (2024).

1.04 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide data for masonry units and masonry accessories.
- C. Shop Drawings: Indicate pertinent dimensions, materials, anchorage, size and type of fasteners, and accessories for brickwork support system.
- D. Initial Samples: Submit manufacturer's complete samples kit for samples of each facing brick units to illustrate color, texture, and extremes of color range.
 - 1. For verification purposes:
 - a. Face brick sample (5-unit set) tile for each type of exposed unit required. Include full range of exposed color and texture to be expected in completed work.
- E. Manufacturer's Certificate: Certify that masonry units meet or exceed specified requirements.
- F. Installer's Qualification Statement.

1.05 QUALITY ASSURANCE

- A. Comply with provisions of TMS 402/602, except where exceeded by requirements of the contract documents.

- B. Installers: Masonry contractor shall have 10 years successful experience with projects of similar size and scope. Submit job list with references.
 - 1. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section
- C. Obtain masonry units from one manufacturer, of uniform texture and color for each kind required, for each continuous area and visually related areas.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, handle, and store masonry units by means that will prevent mechanical damage and contamination by other materials.
 - 1. Handle all units to prevent chipping, cracking, scratching or other damage to units.

PART 2 PRODUCTS

2.01 CONCRETE MASONRY UNITS

- A. Concrete Block: Comply with referenced standards and as follows:
 - 1. Size: Standard units with nominal face dimensions of 16 by 8 inches and nominal depths as indicated on drawings for specific locations.
 - 2. Load-Bearing Units: ASTM C90, normal weight.
 - a. Both hollow and solid block.
- B. Concrete Brick:
 - 1. Concrete Building Brick: ASTM C55; normal weight, solid, for concealed use.

2.02 BRICK UNITS

- A. Facing Brick: ASTM C216, Type FBX, Grade SW.
 - 1. Final brick selection shall be composed of bricks matching existing brick veneer of the building. Confirm final selections with Westmoreland County Housing Authority and Canzian/Johnston & Associates, LLC.
 - a. Colors: Multiple bricks shall be selected from initial samples in order to match existing brick veneer textures and colors.
 - 1) Subject to field verification of blended match and compliance with specifications.
 - 2. Nominal size: Standard modular (4" x 2-2/3" x 8") nominal size brick. For 3/8" joints 3-5/8" x 2-1/4" x 7-5/8" actual manufactured size.
 - 3. Special shapes: Molded units as required by conditions indicated, unless standard units can be sawn to produce equivalent effect.
 - a. Coring: Generally provide cored brick except provide solids where core would otherwise be exposed or where indicated on drawings.
 - 1) Do not use cored brick with net cross-sectional area less than 75 percent of gross area in the same plane or with core holes closer than 3/4 inch from any edge.

2.03 MORTAR AND GROUT MATERIALS

- A. Mortar and Grout: As specified in Section 04 0511.

2.04 REINFORCEMENT AND ANCHORAGE

- A. Compatibility: Ensure components and materials are compatible with specified accessories and adjacent materials.
- B. WireTies: Trapezoidal or rectangular wire ties, 0.1875 inch thick, hot dip galvanized to ASTM A153/A153M, Class B. Flexible head of carbon steel, 3/4 inch wide with hole for fastener, hot dip galvanized to ASTM A153/A153M, Class B.

2.05 FLASHINGS

- A. Copper Core Type Flashing: 5 oz/sq ft copper sheet laminated between two sheets of polymer or fiberglass fabric.
 - 1. Manufacturers:

- a. Advanced Building Products, Inc.; Copper Sealtite 2000: www.advancedbuildingproducts.com/#sle.
 - b. York Manufacturing, Inc; Multi-Flash 500 Series: www.yorkmfg.com/#sle.
 - c. STS Coatings Inc.; Gorilla-Flash CF-500.
 - d. Substitutions: See Section 01 6000 - Product Requirements.
- B. Copper/Polymer Fabric Drainage Plane Flashing System : 5 oz/sq ft copper sheet bonded with rubber-based adhesive between one sheet of polymer fabric and one sheet of non-woven drainage material.
 - 1. Corners, end dams, and splice materials: Copper Core Type.
 - 2. Manufacturers:
 - a. STS Coatings, Inc; Gorilla-Flash VF-1000: www.stscoatings.com/#sle.
 - b. York Manufacturing, Inc; Flash-Vent: www.yorkmfg.com/#sle.
 - c. Substitutions: See Section 01 6000 - Product Requirements.
- C. Stainless Steel Drip Plate: ASTM A666, Type 304; 26 gage (0.45 mm) thick; provide prefabricated inside and outside corners as well as end dams.
 - 1. Manufacturers:
 - a. Hohmann & Barnard, Inc; Product DP and DP-LB: www.h-b.com.
 - b. Substitutions: See Section 01 6000 - Product Requirements.
- D. Termination Bar: Pre-punched stainless steel, Type 304; 1/8 inch x 1 inch.
 - 1. Manufacturers:
 - a. Hohmann & Barnard, Inc; Product T1 - Termination Bar: www.h-b.com.
 - b. Substitutions: See Section 01 6000 - Product Requirements.
- E. Flashing Sealant/Adhesives: Silicone, polyurethane, or silyl-terminated polyether/polyurethane or other type required or recommended by flashing manufacturer; type capable of adhering to type of flashing used.
 - 1. Manufacturers, Modified Polyether Products:
 - a. Mortar Net Solutions; MPE-1: www.mortarnet.com/#sle.
 - b. York Manufacturing, Inc; UniverSeal US-100 Liquid Tape: www.yorkmfg.com/#sle.
 - c. Substitutions: See Section 01 6000 - Product Requirements.

2.06 ACCESSORIES

- A. Joint Filler: Closed cell neoprene; conforming to ASTM D-1056 Grade 2A1.
 - 1. Manufacturers:
 - a. Dur-O-Wal; Product DA2015 Rapid Expansion Joint and DA2010 Rapid Soft Joint: www.dur-o-wal.com.
 - b. Hohmann & Barnard, Inc (including Dur -O-Wal brand); #NS Closed-Cell Neoprene Sponge: www.h-b.com/#sle.
- B. Weeps and Cavity Vents: Polypropylene honeycomb design, insect resistant, with minimum 3 1/2 inches height.
 - 1. Performance Standards: Polypropylene tested in conformance with ASTM D-2240, D-790B, D-638, and D-1238B.
 - 2. Color(s): As selected by Canzian/Johnston & Associates, LLC from manufacturer's full range.
 - a. Manufacturers:
 - 1) Hohmann & Barnard, Inc: www.h-b.com/#sle.
 - 2) Substitutions: See Section 01 6000 - Product Requirements.
- C. Compatible fasteners, accessories and other materials required for complete installation of indicated materials.
- D. Cleaning Solution: Non-acidic, not harmful to masonry work or adjacent materials.
 - 1. Masonry Cleaner: ProSoCo "600" for dark colored masonry and ProSoCo "Vana-trol" light colored masonry or other equals as approved by Canzian/Johnston & Associates, LLC.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that field conditions are acceptable and are ready to receive masonry.
- B. Verify that related items provided under other sections are properly sized and located.
- C. Report in writing to Canzian/Johnston & Associates, LLC all prevailing conditions that will adversely affect satisfactory execution of work. Do not proceed with work until unsatisfactory conditions have been corrected.
 - 1. Starting work constitutes acceptance of the existing conditions and the Contractor shall be responsible for any delays or changes required to existing conditions at the Contractor's expense.

3.02 PREPARATION

- A. Clean reinforcement of loose rust.
- B. Provide temporary bracing during installation of masonry work. Maintain in place until building structure provides permanent bracing.

3.03 COLD AND HOT WEATHER REQUIREMENTS

- A. Comply with requirements of TMS 402/602 or applicable building code, whichever is more stringent.

3.04 COURSING

- A. Establish lines, levels, and coursing indicated. Protect from displacement.
- B. Maintain masonry courses to uniform dimension. Form vertical and horizontal joints of uniform thickness.
- C. Concrete Masonry Units:
 - 1. Bond: Running.
 - 2. Coursing: One unit and one mortar joint to equal 8 inches.
 - 3. Mortar Joints: Concave.
- D. Brick Units:
 - 1. Bond: 1/3 Running.
 - a. Lay concealed masonry with all units in a wythe bonded by lapping not less than 2 inches.
 - b. Bond and interlock each course of each wythe at corners, unless otherwise shown or necessary to match existing bond and interlocking.
 - 2. Coursing: Three units and three mortar joints to equal 8 inches.
 - 3. Mortar Joints: Concave.

3.05 PLACING AND BONDING

- A. Layout walls in advance for accurate spacing of surface bond patterns, with uniform joint widths and to properly locate openings, movement-type joints, returns and offsets. Avoid the use of less-than-half-size units at corners, jambs and wherever possible at other locations.
 - 1. Coordinate lay-out of masonry with surrounding construction to assure proper dimensions, coursing, bond patterns and joints.
 - 2. Prior to installing masonry, inform Canzian/Johnston & Associates, LLC of conflicts between surrounding construction and masonry work. Resolve masonry details in manner acceptable to Canzian/Johnston & Associates, LLC before proceeding.
- B. Lay-up walls plumb and true and with courses level, accurately spaced and coordinated with other work.
 - 1. Bed joints in adjoining walls where both walls are exposed to view shall align.
- C. Lay brick and other solid masonry units in full bed of mortar, with full head joints, uniformly jointed with other work.

1. Butter ends with sufficient mortar to fill head joints and shove into place. Do not slush head joints.
- D. Lay hollow masonry units with face shell bedding on head and bed joints.
 1. Bed webs in mortar in starting course on footings and foundation walls and in all courses of piers, columns and pilasters, and where adjacent to cells or cavities to be reinforced or to filled with concrete or grout.
- E. Buttering corners of joints or excessive furrowing of mortar joints is not permitted.
- F. Remove excess mortar and mortar smears as work progresses.
- G. Interlock intersections and external corners.
- H. Do not shift or tap masonry units after mortar has achieved initial set. Where adjustment must be made, remove mortar and replace.
- I. Perform job site cutting of masonry units with proper tools to provide straight, clean, unchipped edges. Prevent broken masonry unit corners or edges.
 1. Cut units as required to provide pattern shown and to fit adjoining work neatly. Use full units without cutting wherever possible. Review horizontal coursing layout with Canzian/Johnston & Associates, LLC prior to erection. Discuss possible dimensional relocation of openings to provide full or 1/2 units if possible.
- J. Lay concealed masonry with all units in a wythe bonded by lapping not less than 2".
- K. Where the composition and cross section of walls change such that masonry units of lesser depth bear on non-solid masonry units of greater depth, grout voids, cells, cores, etc. full in masonry of greater depth for one course only.
- L. Stopping and Resuming Work: Rake back 1/2-masonry unit length in each course; do not tooth. Clean exposed surfaces of set masonry and remove loose masonry units and mortar prior to laying fresh masonry.

3.06 WEEPS/CAVITY VENTS

- A. Install weeps in cavity walls at 24 inches on center horizontally above through-wall flashing, above shelf angles and lintels, at bottom of walls, and in accordance with Drawings.
- B. Install cavity vents in veneer and cavity walls at 32 inches on center horizontally below shelf angles and lintels and near top of walls.

3.07 REINFORCEMENT AND ANCHORAGE - GENERAL

3.08 REINFORCEMENT AND ANCHORAGE - MASONRY VENEER

- A. Masonry Back-Up: Embed anchors to bond veneer at maximum 16 inches on center vertically and 24 inches on center horizontally. Place additional anchors at perimeter of openings and ends of panels, so maximum spacing of anchors is 8 inches on center.

3.09 MASONRY FLASHINGS

- A. Install where indicated, specified, or required in accord with flashing manufacturer's written instructions and as follows. Splicing material on material width to manufacture wider pieces is prohibited unless flashing detail requires material wider than normally manufactured.
- B. Whether or not specifically indicated, install masonry flashing to divert water to exterior at all locations where downward flow of water will be interrupted such as corbels, all shelf angles, lintels, above intersecting walls at lower elevations and ledges.
 1. At horizontal flashing terminations, turn up ends at least 2 inches and make careful folds to form end dam, with seams sealed.
 - a. Do not stretch flashing materials.
 - b. Fold ends of flashing at end to form dam; seal.
 2. Remove or cover protrusions or sharp edges that could puncture flashings.
- C. Seal lapped ends and penetrations of flashing before covering with mortar.
- D. Seal metal joints watertight.

- E. Install in accordance with the more stringent requirements of both the manufacturer's instructions, drawing details, and the following:
 - 1. Horizontal Surfaces: Drip plate, with drip oriented to exterior face of exterior wythe, shall be laid in a bed of polyether sealant. Flashing shall be laid in a bed of polyether sealant applied to the top surface of the drip plate and topped with a fresh full bed of mortar. Flashing shall be trimmed flush with the exterior face of the wall after inspection.
 - 2. Vertical Surfaces: Surfaces receiving the flashing shall be sufficiently clean. Apply flashing with wicking surface facing up to the outside. Flashing shall extend vertically along substrate a minimum of 8 inches. Install continuous termination bar over top edge of flashing. Fasten to masonry surfaces with headed stainless steel fastener at 16 inch centers. Fasten to sheathing on cold formed metal sections with headed stainless steel fastener at 16 inch centers. Seal and counterflash termination bar in accordance with Section 07 2500.
 - 3. CavityWall Flashing: Flashing width required to trim flush with the outside face of exterior wythe after inspection, extend through cavity, rising height required to cross cavity and extend up back wall at least 8 inches, rising height required to extend above lintel steel at least 6 inches. Install on back wall using technique indicated above in Vertical Surfaces paragraph. Flashing for exterior wythe at horizontal surfaces shall be laid using technique indicated above in Horizontal Surfaces paragraph.
 - 4. Head and Sill Flashing: The flashing shall be trimmed flush with the outside of the wall or lintel angle after inspection and then carried through or up the wall as indicated. Flashing shall extend 6 inches beyond each side of the opening and be turned up at the sides forming a pan. All end dams shall be folded, not cut.
- F. Laps and splices at end joints shall be installed in accordance with the flashing manufacturer's established details. Where the flashing manufacturer does not have established details or installation instructions, lap end joints of flashings at least 4 inches and seal watertight with polyether sealant unless otherwise indicated within manufacturer's installation instructions.
- G. Laps and splices at end joints shall be installed in accordance with the flashing manufacturer's established details. Where the flashing manufacturer does not have established details or installation instructions, lap end joints of flashings at least 6 inches and seal watertight with polyether sealant unless otherwise indicated within manufacturer's installation instructions.
- H. Inside corners: Folded, not cut; seal.
- I. Outside corners: Make in industry accepted manner acceptable to flashing material manufacturer using outside corner and splice material.
- J. Patch minor punctures with material in accord with manufacturer's installation instructions.
- K. Replace ripped, torn, or severely damaged flashing with new material.
- L. Flashing Schedules:
 - 1. Locations for Copper/Polymer Fabric Flashing System:
 - a. All lintel locations.
 - b. Other locations indicated.
 - 2. Locations for Copper Core Type Flashing:
 - a. At corners, end dams, laps and splices for Copper/Polymer Fabric Flashing System.

3.10 CONTROL AND EXPANSION JOINTS

- A. Control Joint Spacing: If location of control joints is not shown, place vertical joints spaced not to exceed 24 feet on center for concrete masonry wythes and no more than 12 feet from building corners.
- B. Install preformed control joint device in continuous lengths. Seal butt and corner joints in accordance with manufacturer's instructions.
- C. Vertical Expansion Joints in Brickwork:

1. Expansion Joint Spacing: If location of expansion joints is not shown, place vertical joints not to exceed 25 feet o.c. for brickwork without openings, or 20 feet o.c. for brickwork with multiple openings.
 - a. When spacing between vertical expansion joints in parapets is more than 15 feet o.c., make expansion joints halfway between full-height expansion joints.
2. Where not indicated, place expansion joints in brickwork as follows:
 - a. At or near corners with no expansion joint further than 10 feet from corner or closer than 2 feet to corner.
 - b. At offsets and setbacks.
 - c. At wall intersections.
 - d. At changes in wall height.
 - e. Where wall backing system changes.
 - f. Where support of brick veneer changes.
- D. Horizontal Expansion Joints in Brick Veneer:
 1. Locate immediately below shelf angles.
 2. Minimum 1/4 inch space or compressible material below shelf angle.
 3. For brick infill, place between the top of brickwork and structural frame.

3.11 BUILT-IN WORK

- A. As work progresses, install built-in anchor bolts and plates and other items to be built into the work and furnished under other sections.
- B. Install built-in items plumb, level, and true to line.
- C. Do not build into masonry construction organic materials that are subject to deterioration.

3.12 TOLERANCES

- A. Maximum Variation from Alignment of Columns: 1/4 inch.
- B. Maximum Variation From Unit to Adjacent Unit: 1/16 inch.
- C. Maximum Variation from Plane of Wall: 1/4 inch in 10 ft and 1/2 inch in 20 ft or more.
- D. Maximum Variation from Plumb: 1/4 inch per story non-cumulative; 1/2 inch in two stories or more.
- E. Maximum Variation from Level Coursing: 1/8 inch in 3 ft and 1/4 inch in 10 ft; 1/2 inch in 30 ft.
- F. Maximum Variation of Mortar Joint Thickness: Head joint, minus 1/8 inch, plus 1/8 inch in 3 feet.
- G. Maximum Variation from Cross Sectional Thickness of Walls: 1/4 inch.

3.13 CUTTING AND FITTING

- A. Cut and fit for loose lintels. Coordinate with other sections of work to provide correct size, shape, and location.
- B. Obtain approval prior to cutting or fitting masonry work not indicated or where appearance or strength of masonry work may be impaired.

3.14 CLEANING

- A. Verify mortar is fully set and cured.
- B. Remove excess mortar and mortar droppings.
- C. Replace defective mortar. Match adjacent work.
- D. Clean soiled surfaces with cleaning solution.
 1. Clean in accordance with manufacturer's recommendations.
 2. Protect area below cleaning operation and keep masonry soaked with water and flushed free of acid and dissolved mortar continuously for duration of cleaning.
 3. Protect window glass and non-masonry surfaces from exposure to the cleaning materials.
- E. Use non-metallic tools in cleaning operations.

- F. Using muriatic acid or alkali cleaning agents not specified herein is not permitted.

3.15 PROTECTION

- A. Without damaging completed work, provide protective boards at exposed external corners that are subject to damage by construction activities.
- B. Staining: Prevent mortar from staining the face of masonry to be left exposed. Remove immediately mortar in contact with such masonry.
- C. Protect sills, ledges and projections from droppings of mortar and other construction materials.
- D. Remove and replace masonry units which are loose, broken, stained or otherwise damaged, or if units do not match adjoining units as intended and demonstrated with the mock-up. Provide new units to match adjoining units and install in fresh mortar, pointed to eliminate evidence of replacement at no additional cost to Westmoreland County Housing Authority.

**SECTION 05 5000
METAL FABRICATIONS**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Shop fabricated steel items.

1.02 RELATED REQUIREMENTS

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

1.03 REFERENCE STANDARDS

- A. ASTM A36/A36M - Standard Specification for Carbon Structural Steel; 2014.
- B. ASTM A123/A123M - Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products; 2017.
- C. ASTM A283/A283M - Standard Specification for Low and Intermediate Tensile Strength Carbon Steel Plates; 2013.
- D. ASTM A307 - Standard Specification for Carbon Steel Bolts, Studs, and Threaded Rod 60 000 PSI Tensile Strength; 2014.
- E. SSPC-Paint 15 - Steel Joist Shop Primer/Metal Building Primer; 2004.
- F. SSPC-Paint 20 - Zinc-Rich Coating (Type I - Inorganic, and Type II - Organic); 2019.
- G. SSPC-SP 2 - Hand Tool Cleaning; 2018.

1.04 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Shop Drawings: Indicate profiles, sizes, connection attachments, reinforcing, anchorage, size and type of fasteners, and accessories. Include erection drawings, elevations, and details where applicable.

PART 2 PRODUCTS

2.01 MATERIALS - STEEL

- A. Steel Sections and Plates: ASTM A36/A36M.
- B. Plates: ASTM A283/A283M.
- C. Mechanical Fasteners: Same material as or compatible with materials being fastened; type consistent with design and specified quality level.
- D. Unheaded Anchor Rods: ASTM F1554, Grade 36, zinc coated, with matching ASTM A563 or A563M nuts and ASTM F436 Type 1 washers.
- E. Shop and Touch-Up Primer: SSPC-Paint 15, complying with VOC limitations of authorities having jurisdiction.
- F. Touch-Up Primer for Galvanized Surfaces: SSPC-Paint 20, Type I - Inorganic, complying with VOC limitations of authorities having jurisdiction.

2.02 FABRICATION

- A. Form exposed work true to line and level with accurate angles and surfaces and straight sharp edges.
- B. Shear and punch metals cleanly and accurately. Remove burrs.
- C. Fit and shop assemble items in largest practical sections, for delivery to site.
- D. Furnish components required for anchorage of fabrications. Fabricate anchors and related components of same material and finish as fabrication, except where specifically noted otherwise.
 - 1. Fabricate and space anchoring devices to provide adequate support for intended use.

2.03 FABRICATED ITEMS

- A. Shop fabricate hot rolled steel to the greatest extent possible.
- B. Shelf Angles Not Attached to Structural Framing: For support of masonry; galvanized.
 - 1. Fabricate ledge and shelf angles from steel angles of sizes indicated and for attachment to structure. Provide horizontally slotted holes to receive indicated bolts or where not indicated, 3/4-inch bolts, spaced not more than 6 inches from ends and 24 inches on center, unless otherwise indicated.
- C. Miscellaneous Framing and Supports: Provide steel framing and supports for applications that are not a part of structural steel framework as required to complete the Work.
 - 1. Fabricate units to sizes, shapes, and profiles indicated and required to receive other adjacent construction retained by framing and supports. Fabricate from structural steel shapes, plates, and steel bars of welded construction using mitered joints for field connection. Cut, drill, and tap units to receive hardware, hangers, and similar items.
 - a. Galvanize miscellaneous framing and supports.

2.04 FINISHES - STEEL

- A. Prime paint steel items.
 - 1. Exceptions: Galvanize items to be embedded in concrete, items to be embedded in masonry, and items located at exterior locations.
- B. Prepare surfaces to be primed in accordance with SSPC-SP2.
- C. Clean surfaces of rust, scale, grease, and foreign matter prior to finishing.
- D. Prime Painting: One coat.
- E. Galvanizing of Structural Steel Members: Galvanize after fabrication to ASTM A123/A123M requirements. Provide minimum 1.7 oz/sq ft galvanized coating.
- F. Galvanizing of Non-structural Items: Galvanize after fabrication to ASTM A123/A123M requirements.

2.05 FABRICATION TOLERANCES

- A. Squareness: 1/8 inch maximum difference in diagonal measurements.
- B. Maximum Offset Between Faces: 1/16 inch.
- C. Maximum Misalignment of Adjacent Members: 1/16 inch.
- D. Maximum Bow: 1/8 inch in 48 inches.
- E. Maximum Deviation From Plane: 1/16 inch in 48 inches.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that field conditions are acceptable and are ready to receive work.
 - 1. Examine supporting substrates and abutting structural framing, with Erector/Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance. Do not proceed with installation or modifications until unsatisfactory conditions have been corrected.
- B. Verify field measurements and adjust installation as required.
- C. Starting erection constitutes acceptance of the existing conditions and the Contractor shall be responsible for any and all delays or changes required to existing conditions at the Contractor's expense.

3.02 ERECTION

- A. Erect structural steel in compliance with AISC "Code of Standard Practice for Steel Buildings and Bridges".

- B. Allow for erection loads, and provide sufficient temporary bracing to maintain structure in safe condition, plumb, and in true alignment until completion of erection and installation of permanent bracing.
- C. Use carbon steel bolts only for temporary bracing during construction, unless otherwise specifically permitted on drawings. Install high-strength bolts in accordance with AISC "Specification for Structural Joints Using ASTM A325 or A490 Bolts".
- D. Do not field cut or alter structural members without approval of Architect.
- E. After erection, prime welds, abrasions, and surfaces not shop primed, except surfaces to be in contact with concrete.
- F. Align and adjust various members that form part of complete frame or structure before permanently fastening. Before assembly, clean bearing surfaces and other surfaces that will be in permanent contact with members. Perform necessary adjustments to compensate for discrepancies in elevations and alignment.
- G. Do not enlarge unfair holes in members by burning or using drift pins. Ream holes that must be enlarged to admit bolts.

3.03 INSTALLATION

- A. Install items plumb and level, accurately fitted, free from distortion or defects.
- B. Provide for erection loads, and for sufficient temporary bracing to maintain true alignment until completion of erection and installation of permanent attachments.
- C. Obtain approval prior to site cutting or making adjustments not scheduled.
- D. Installing Miscellaneous Framing and Supports:
 - 1. General: Install framing and supports to comply with requirements of items being supported, including manufacturers' written instructions and requirements indicated on Shop Drawings, if any.

3.04 TOLERANCES

- A. Maximum Variation From Plumb: 1/4 inch per story, non-cumulative.
- B. Maximum Offset From True Alignment: 1/4 inch.
- C. Maximum Out-of-Position: 1/4 inch.

END OF SECTION

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**SECTION 07 4213
METAL WALL PANELS**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Manufactured metal panels for exterior wall panels and subgirt framing assembly, with accessory components.

1.02 RELATED REQUIREMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division I Specification Sections, apply to this Section.
- B. Section 07 9200 - Joint Sealants: Sealing joints between metal wall panel system and adjacent construction.

1.03 REFERENCE STANDARDS

- A. AAMA 2605 - Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels (with Coil Coating Appendix); 2022.
- B. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process; 2023.
- C. ASTM B209/B209M - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate; 2021a.
- D. ASTM C645 - Standard Specification for Nonstructural Steel Framing Members; 2014.

1.04 SUBMITTALS

- A. Product Data - Wall System: Manufacturer's data sheets on each product to be used, including:
 - 1. Physical characteristics of components shown on shop drawings.
 - 2. Storage and handling requirements and recommendations.
 - 3. Installation instructions and recommendations.
- B. Shop Drawings: Indicate dimensions, layout, joints, construction details, support clips, and methods of anchorage.
- C. Installer's qualification statement.

1.05 QUALITY ASSURANCE

- A. Successful contractor must obtain all components of wall system from a single manufacturer. Any secondary products that are required which cannot be supplied by the specified manufacturer must be recommended and approved in writing by primary manufacturer.
- B. Installer Qualifications: Company specializing in installing products specified in this section with minimum three years of documented experience.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Protect panels from accelerated weathering by removing or venting sheet plastic shipping wrap.
- B. Store prefinished material off the ground and protected from weather; prevent twisting, bending, or abrasion; provide ventilation; slope metal sheets to ensure proper drainage.
- C. Prevent contact with materials that may cause discoloration or staining of products.

1.07 WARRANTY

- A. See Section 01 7800 - Closeout Submittals for additional warranty requirements.

- B. Finish Warranty: Provide 20-year manufacturer warranty against excessive degradation of exterior finish. Include provision for replacement of units with excessive fading, chalking, or flaking. Complete forms in Westmoreland County Housing Authority's name and register with warrantor.

PART 2 PRODUCTS

2.01 METAL WALL PANEL SYSTEM

- A. Wall Panel System: Factory fabricated prefinished metal panel system, site assembled.
 - 1. Provide exterior wall panels and subgirt framing assembly.
 - 2. Design and size components to support assembly dead loads, and to withstand live loads caused by positive and negative wind pressure acting normal to plane of wall.
 - 3. Maximum Allowable Deflection of Panel: $L/180$ for length(L) of span.
 - 4. Movement: Accommodate movement within system without damage to components or deterioration of seals, movement between system and perimeter components when subject to seasonal temperature cycling; dynamic loading and release of loads; and deflection of structural support framing.
 - 5. Drainage: Provide positive drainage to exterior for moisture entering or condensation occurring within panel system.
 - 6. Fabrication: Formed true to shape, accurate in size, square, and free from distortion or defects; pieces of longest practical lengths.
- B. Exterior Wall Panels:
 - 1. Profile: Flush, flat pans; smooth surface.
 - 2. Side Seams: Interlocking seams, incorporating concealed fasteners.
 - 3. Material: Precoated aluminum sheet, 20 gauge, 0.032 inch minimum thickness.
 - 4. Panel Width: 12 inches.
- C. Subgirt Framing Assembly:
 - 1. Miscellaneous Metal Framing, General: ASTM C645, cold-formed metallic-coated steel sheet, ASTM A653/A653M, G90 (Z275) hot-dip galvanized.
 - 2. Hat-Shaped, Rigid Furring Channels:
 - a. Depth: 7/8 inches.
 - b. Top Flange: 1-1/8 inches minimum.
 - 3. Fasteners for Miscellaneous Metal Framing: Of type, material, size, corrosion resistance, holding power, and other properties required to fasten miscellaneous metal framing members to substrates.
- D. Internal and External Corners: Same material, thickness, and finish as exterior sheets; profile to suit system; shop cut and factory mitered to required angles.
- E. Expansion Joints: Same material, thickness and finish as exterior sheets; ____ gauge, ____ inch thick; manufacturer's standard brake formed type, of profile to suit system.
- F. Trim: Same material, thickness and finish as exterior sheets; brake formed to required profiles.
- G. Anchors: Galvanized steel.

2.02 MATERIALS

- A. Precoated Aluminum Sheet: ASTM B209/B209M aluminum alloy 3003, 3004, 3005, or 3105 with H14 or H24 heat treatment, with smooth surface texture; continuous-coil-coated on exposed surfaces with specified finish coating and on panel back with specified panel back coating.

2.03 FINISHES

- A. Fluoropolymer Coil Coating System: Polyvinylidene fluoride (PVDF) multi-coat superior performing organic coatings system complying with AAMA 2605, including at least 70 percent PVDF resin, and at least 80 percent of coil coated metal surfaces having minimum total dry film thickness (DFT) of 0.9 mil, 0.0009 inch; color and gloss as selected by Architect from manufacturer's standard line.

- B. Concealed Finish: Apply pretreatment and manufacturer's standard white or light-colored polyester backer finish, consisting of prime coat and wash coat with a minimum total dry film thickness of 0.5 mil.

2.04 ACCESSORIES

- A. Concealed fasteners: Corrosion resistant steel screws, #10 minimum diameter x length appropriate for substrate, hex washer head or pancake head. Use self-drilling, self-tapping for metal substrate or A-point for plywood substrate.
- B. Trim: Formed from same material and gauge as wall panels, prepainted with coil coating. Provide trim as required to seal against weather and to provide finished appearance. Locations include, but are not limited to fasciae and fillers. Finish trim with same finish system as adjacent metal wall panels.

2.05 FABRICATION

- A. Fabricate and finish metal panels and accessories at the factory to greatest extent possible, by manufacturer's standard procedures and processes and as necessary to fulfill indicated performance requirements. Comply with indicated profiles and with dimensional and structural requirements.
- B. Form trim components from full single width sheet in minimum 10 feet sections. Provide mitered trim corners, joined using closed end pop rivets.
 - 1. Form exposed sheet metal accessories that are without excessive oil canning, buckling, and tool marks and that are true to line and levels indicated, with exposed edges folded back to form hems.
- C. Conceal fasteners and expansion provisions where possible. Exposed fasteners are not allowed on faces of accessories exposed to view.

PART 3 EXECUTION

3.01 PREPARATION

- A. Install subgirts perpendicular to panel length, securely fastened to substrates and shimmed and leveled to uniform plane, and spaced at intervals indicated.
- B. Protect surrounding areas and adjacent surfaces from damage during execution of this work.

3.02 INSTALLATION

- A. Install panels on soffits in accordance with manufacturer's instructions.
- B. Protect surfaces in contact with cementitious materials and dissimilar metals with bituminous paint; allow to dry prior to wall panel installation.
- C. Fasten panels to structural supports; aligned, level, and plumb.
- D. Use concealed fasteners unless otherwise indicated by Canzian/Johnston & Associates, LLC.
- E. Provide for temperature expansion/contraction movement of panels at wall penetrations and wall mounted equipment in accordance with system manufacturer's product data and design calculations.

3.03 TOLERANCES

- A. Offset From True Alignment Between Adjacent Members Abutting or In Line: 1/16 inch, maximum.

3.04 CLEANING

- A. Remove site cuttings from finish surfaces.
- B. Remove protective material from wall panel surfaces.

3.05 PROTECTION

- A. Protect metal wall panels until completion of project.

- B. Touch-up, repair, or replace damaged wall panels or accessories before Date of Substantial Completion at no additional cost to Westmoreland County Housing Authority.

END OF SECTION

**SECTION 07 5300
ELASTOMERIC MEMBRANE ROOFING**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Elastomeric roofing membrane, adhered conventional application.
- B. Insulation, flat and tapered, mechanically fastened and adhered application.
- C. Vapor retarder/Temporary Roof.
- D. Roofing stack boots and walkway pads.
- E. Commencement of work by Contractor shall constitute acknowledgement by Contractor that this specification can be satisfactorily executed, under the project conditions and with all necessary prerequisites for warranty acceptance by roofing membrane manufacturer. No modification of the Contract Sum will be made for failure to adequately examine the Contract Documents or the project conditions.

1.02 RELATED REQUIREMENTS

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

1.03 REFERENCE STANDARDS

- A. AAMA 2605 - Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels (with Coil Coating Appendix); 2022.
- B. ASCE 7 - Minimum Design Loads and Associated Criteria for Buildings and Other Structures; Most Recent Edition Cited by Referring Code or Reference Standard.
- C. ASTM C1177/C1177M - Standard Specification for Glass Mat Gypsum Substrate for Use as Sheathing; 2017.
- D. ASTM C1289 - Standard Specification for Faced Rigid Cellular Polyisocyanurate Thermal Insulation Board; 2023.
- E. ASTM D624 - Standard Test Method for Tear Strength of Conventional Vulcanized Rubber and Thermoplastic Elastomers; 2000 (Reapproved 2020).
- F. UL (DIR) - Online Certifications Directory; Current Edition.
- G. UL (FRD) - Fire Resistance Directory; Current Edition.
- H. UL 790 - Standard for Standard Test Methods for Fire Tests of Roof Coverings; Current Edition, Including All Revisions.

1.04 ADMINISTRATIVE REQUIREMENTS

- A. Pre-Installation Conference: Before start of roofing work, Contractor shall hold a meeting to discuss the proper installation of materials and requirements to achieve the warranty.
 - 1. Require attendance with all parties directly influencing the quality of roofing work or affected by the performance of roofing work.
 - 2. Notify Canzian/Johnston & Associates, LLC well in advance of meeting, minimum of 14 calendar days.

1.05 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements for submittal procedures.
- B. Product Data: Provide manufacturer's written information listed below.
 - 1. Product data indicating membrane materials, flashing materials, insulation, vapor retarder, surfacing, and fasteners.
 - 2. Preparation instructions and recommendations.
 - 3. Storage and handling requirements.

- C. Shop Drawings: Indicate joint or termination detail conditions, conditions of interface with other materials, setting plan for tapered insulation, mechanical fastener layout, and calculations for withstanding wind uplift forces as calculated using the current revision of ASCE-7..
- D. Samples: Submit samples of each product to be used.
- E. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.
- F. Manufacturer's Installation Instructions: Indicate membrane seaming precautions, special procedures, and perimeter conditions requiring special attention.
- G. Manufacturer's Field Reports: Indicate procedures followed, ambient temperatures, and supplementary instructions given.
- H. Installer's qualification statement.
- I. Warranty: Submit manufacturer warranty and ensure forms have been completed in Westmoreland County Housing Authority's name and registered with manufacturer.

1.06 QUALITY ASSURANCE

- A. Single Source Responsibility: Provide and install products from single source.
- B. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum thirty (30) years of documented experience.
- C. Technical Representative Qualifications: Contractor shall engage the roofing manufacturer's technical inspector to make periodic inspections of the installation of roof system. The manufacturer's technical inspector shall:
 - 1. Not be a salesperson or have any sales responsibilities
 - 2. Must be an employee of the manufacturer for a minimum of three (3) years.
 - 3. Must have been formally trained by the roofing manufacturer with documentation to prove training.
 - 4. An accredited Registered Roof Observers shall be acceptable.
- D. Manufacturer's Field/Sales Advisor: This person is the manufacturer's representative that has sales responsibilities. This person is required to visit the job site a minimum of once bi-weekly during the entire project. Responsibilities include monitoring the project in addition to the technical inspector described above to assure the specifications are being followed by the roofing contractor and report any discrepancies back to the owner's representatives.
 - 1. Minimum years of roofing experience: 5 years
- E. Installer Qualifications:
 - 1. All products listed in this section are to be installed by a single installer with a minimum of ten (10) years demonstrated experience in installing products from specified manufacturer(s) of the same type and scope as specified.
 - 2. Installer must be capable of extending the Manufacturer's Labor and Materials guarantee.
 - 3. Installer must be capable of extending the Manufacturer's No Dollar Limit guarantee.

1.07 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials in manufacturer's original containers, dry and undamaged, with seals and labels intact.
- B. Store materials in weather protected environment, clear of ground and moisture.
- C. Ensure storage and staging of materials does not exceed static and dynamic load-bearing capacities of roof decking.
- D. Keep combustible materials away from ignition sources.
- E. Protect foam insulation from direct exposure to sunlight.

1.08 FIELD CONDITIONS

- A. Do not apply roofing membrane during unsuitable weather.

- B. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.
- C. Safety Data Sheets (SDS) must be on location at all times during the transportation, storage and application of materials.
- D. When positioning membrane sheets, exercise care to locate all field splices away from low spots and out of drain sumps. All field splices should be shingled to prevent bucking of water.
- E. Proceed with roofing work only when weather conditions are in compliance with the manufacturer's recommended limitations, and when conditions will permit the work to proceed in accordance with the manufacturer's requirements and recommendations.
- F. Proceed with work so new roofing materials are not subject to construction traffic. When necessary, new roof sections shall be protected and inspected upon completion for possible damage.
- G. Provide protection, minimum 3/4 inch thick plywood, for all roof areas exposed to traffic during construction. Plywood must be smooth and free of fasteners and splinters.
- H. The surface on which the insulation or roofing membrane is to be applied shall be clean, smooth, dry, and free of projections or contaminants that would prevent proper application of or be incompatible with the new installation, such as fins, sharp edges, foreign materials, oil and grease.
- I. New roofing shall be complete and weathertight at the end of the work day.
- J. Contaminants such as grease, fats and oils shall not be allowed to come in direct contact with the roofing membrane.
- K. Do not apply roofing membrane to damp or frozen deck surface or when precipitation is expected or occurring.
- L. Do not expose materials vulnerable to water or sun damage in quantities greater than can be weatherproofed the same day.
- M. Schedule applications so that no partially completed sections of roof are left exposed at end of workday. Only as much existing roofing that can be removed and new roofing can be installed shall be performed in any one day.

1.09 WARRANTY

- A. See Section 01 7800 - Closeout Submittals for additional warranty requirements.
- B. System Warranty: Provide manufacturer's system warranty agreeing to repair or replace roofing that leaks or is damaged due to wind or other natural causes.
 - 1. Warranty Term: 30 years.
 - 2. For repair and replacement include costs of both material and labor in warranty.
 - 3. Wind Speed: 72 mph maximum wind speed.
 - 4. Coverage to be extended to include roof edge metal water tightness in accordance with terms stated in the Warranty document.
 - 5. Exceptions NOT Permitted:
 - a. Damage due to roof traffic.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Basis of Design: SynTec Sure-Seal adhered 90-mil black EPDM, products, materials and accessories as manufactured or approved for use by Carlisle Roofing Systems, Inc. (www.carlisle-syntec.com) and the terminology used may include reference to proprietary products of that company.

1. The various materials and products specified in the specifications by name or description are given to establish a standard of quality of workmanship and materials to be provided under this Section. It is not the intent to limit the bidder, the bid or the evaluation of the bid to any one material or product specified but rather to describe the minimum standard. A bid containing an alternative which does not meet the specifications will be declared non-responsive.
2. Substitutions: See Section 01 6000 - Product Requirements.

2.02 ROOFING

- A. Roof System: Provide a waterproof roof system, capable of withstanding uplift forces as indicated.
 1. Membrane Attachment: Fully Adhered.
- B. Base Flashing: Provide a waterproof, fully adhered base flashing system at all penetrations, plane transitions and terminations.
- C. Insulation: Provide a roof insulation system beneath the finish membrane.
- D. Elastomeric Membrane Roofing: One ply membrane, fully adhered over insulation and vapor retarder/temporary roof.
- E. Roofing Assembly Requirements:
 1. Wind Uplift Performance:
 - a. Roof system shall be designed to withstand wind uplift forces as calculated using the current revision of ASCE 7.
 2. Fire Resistance Performance: Roof system will achieve a UL Class A rating when tested in accordance with UL 790.
 3. Fire Resistance Performance: Roof assembly shall have been tested by the membrane roofing manufacture and shall have satisfactorily passed UL 1256.
 4. Roof Covering External Fire Resistance Classification: UL (DIR) certified Class A.
 5. Thermal Performance: Average Thermal Value (R), minimum: 30; provide insulation of thickness required.
 6. Drainage: Provide a roof system with positive drainage where all standing water dissipates within 48 hours after precipitation ends.
 7. Building Codes:
 - a. Roof system will meet the requirements of all federal, state and local code bodies having jurisdiction.

2.03 AIR/VAPOR BARRIER

- A. Air/Vapor Barrier: A 40-mil composite consisting of 35-mils of self-adhering rubberized asphalt laminated to a 5-mil woven polypropylene film and is fully compatible with insulation adhesive.
 1. Primer: Cav Grip III or as recommended by membrane manufacturer.
 2. Basis of Design: VapAir Seal 725TR Air/Vapor Barrier as manufactured or approved for use by Carlisle Roofing Systems, Inc. (www.carlisle-syntec.com) and the terminology used may include reference to proprietary products of that company.
 - a. Substitutions: See Section 01 6000 - Product Requirements.

2.04 ROOFING MEMBRANE AND ASSOCIATED MATERIALS

- A. Membrane: Ethylene-propylene-diene-terpolymer (EPDM); non-reinforced; complying with minimum properties of ASTM D4637.
 1. Thickness: 0.090 inch.
 2. Color: Black.
 3. Elongation: 480 percent, measured in accordance with ASTM D412.
 4. Tear Strength: 200 lbf per inch, measured in accordance with ASTM D624.
 5. Adhesive: Cav Grip or as recommended by membrane manufacturer.
- B. Seaming Materials: As recommended by membrane manufacturer for indicated warranty.

- C. Flexible Flashing Material: Same material as membrane or as required by manufacturer for warranty.

2.05 DECK SHEATHING

- A. Deck Sheathing: Glass mat faced gypsum panels, ASTM C1177/C1177M, 5/8 inch thick.
 - 1. Thickness: 5/8 inch, Type X, fire-resistant.
 - 2. Products:
 - a. Georgia-Pacific; DensDeck Prime with EONIC Technology:
www.densdeck.com/#sle.
 - b. USG Corporation; Securock Ultralight Coated Glass-Mat Roof Board:
www.usg.com/#sle.
 - c. Substitutions: See Section 01 6000 - Product Requirements.

2.06 INSULATION

- A. Polyisocyanurate (ISO) Board Insulation: Rigid cellular foam, complying with ASTM C1289.
 - 1. Classifications:
 - a. Type II: Faced with either cellulosic facers or glass fiber mat facers on both major surfaces of the core foam.
 - 1) Class 1 - Faced with glass fiber reinforced cellulosic facers on both major surfaces of the core foam.
 - 2) Compressive Strength: Classes 1-2-3, Grade 3 - 25 psi (172 kPa), minimum.
 - 3) Thermal Resistance, R-value: At 1-1/2 inches thick; Class 1, Grades 1-2-3 - 8.4 (1.48) at 75 degrees F.
 - 2. Board Size (both Tapered and Constant Thickness): 48 by 48 inches.
 - 3. Board Thickness: As indicated on Drawings.
 - 4. Tapered Board: Slope as indicated on Drawings; fabricate of fewest layers possible.
 - 5. Board Edges: Square.

2.07 CLEANERS, PRIMERS, ADHESIVES AND SEALANTS

- A. Tape: Splice tape used for splicing adjoining sections of EPDM membrane; width as required for warranty.
- B. Two-Part Pourable Sealer: A black, two-component, solvent-free, polyurethane based product used for tie-ins and as a sealant around hard-to-flash membrane penetrating objects such as clusters of pipes and for a daily seal when the completion of flashings and terminations cannot be completed by the end of each work day. Can also be used for attaching lightning rod bases and ground cable clips to the membrane surface.
- C. Adhesive: A spray or extruded applied, two-component polyurethane, low-rise expanding foam adhesive used for attaching approved insulations to compatible substrates (concrete, cellular lightweight insulating concrete, gypsum, cementitious wood fiber, wood or steel) or existing smooth or gravel surfaced BUR, modified bitumen or cap sheets.
- D. Low VOC Bonding Adhesive: High strength, solvent-based, Low VOC contact adhesive that allows bonding of EPDM membranes to various porous and non-porous substrates.
- E. Low VOC EPDM Primer: Solvent Based, Low VOC primer for one-step cleaning and priming of EPDM surfaces prior to application of SecurTape and other pressure sensitive flashing and seaming products.
- F. Primer: A single component, solvent based, high tack primer used to provide maximum adhesion between Vapor Retarder and an approved substrate.
- G. Cav-Grip: a multi-purpose contact adhesive recommended for enhancing bond of CCW self-adhering sheet products and for bonding board insulation to various substrates.

2.08 EDGINGS AND TERMINATIONS

- A. Counterflashing:
 - 1. Material: Minimum 0.050 inch thick aluminum.

2. Configuration: Surface mounted and recessed with reglet (one or two piece) for existing conditions and in accordance with warranty requirements.
 3. Finish:
 - a. Polyvinylidene Fluoride (PVDF) Coating: Superior performing organic powder coating, AAMA 2605; pretreated metal with two coat system including primer and color coat with at least 70 percent PVDF coating.
 - b. Color: As selected by Canzian/Johnston & Associates, LLC from manufacturer's standard colors.
 4. Basis of Design: SecurEdge Counter Flashing as manufactured or approved for use by Carlisle Roofing Systems, Inc. (www.carlisle-syntec.com) and the terminology used may include reference to proprietary products of that company.
 - a. Substitutions: See Section 01 6000 - Product Requirements.
- B. Metal Roof Edging and Fascia: Continuous metal edge member serving as termination of roof membrane and retainer for metal fascia; watertight with no exposed fasteners; mounted to roof edge nailer.
1. Wind Performance:
 - a. Membrane Pull-Off Resistance: 100 lbs/ft, minimum, when tested in accordance with ANSI/SPRI ES-1 Test Method RE-1, current edition.
 - b. Fascia Pull-Off Resistance: At least the minimum required when tested in accordance with ANSI/SPRI ES-1 Test Method RE-2, current edition.
 2. Anchor bar fascia system.
 - a. Material: Minimum 0.050 inch thick aluminum.
 - b. Fascia Height: 6-1/2 inches and 11 inches .
 - c. Finish:
 - 1) Polyvinylidene Fluoride (PVDF) Coating: Superior performing organic powder coating, AAMA 2605; pretreated metal with two coat system including primer and color coat with at least 70 percent PVDF coating.
 - 2) Color: As selected by Canzian/Johnston & Associates, LLC from manufacturer's standard colors.
 - d. Basis of Design: Securedge One Fascia and Securedge One Extended Fascia as manufactured or approved for use by Carlisle Roofing Systems, Inc. (www.carlisle-syntec.com) and the terminology used may include reference to proprietary products of that company.
 - 1) Substitutions: See Section 01 6000 - Product Requirements.

2.09 ACCESSORIES MATERIALS

- A. New Aluminum Insert Retrofit Drains:
1. Location(s): Provide at all existing roof drains unless noted otherwise.
 2. Drain Body:
 - a. Material: 1-piece, 11-gauge (0.125-inch) spun aluminum.
 - b. Flange: 17-1/2-inch diameter.
 - c. Drain Stem Length: Verify existing length of rainwater conductor for stem length; verify in field.
 - d. Flange Includes: Six 2-1/2-inch-long aluminum studs.
 - e. Sump Area: Depressed.
 3. Strainer Dome:
 - a. Material: Cast aluminum.
 - b. Height: 7.25 inches.
 - c. Outside Base Diameter: 9.77 inches.
 4. Clamping Ring:
 - a. Material: Cast aluminum.
 - b. Gravel Stop Height: 1.2 inches.
 - c. Drainage Slots: 18 V-shaped.
 - d. Bosses: 6, to accept studs on flange.

5. Backflow Seal:
 - a. Compression Seal: Watertight, "U-Flow" mechanical seal.
 - b. Material: Polyamide and EPDM rubber.
 - c. Required for Activation: "U-Flow" screwdriver.
- B. Wood Nailers: PS 20 dimension lumber, Structural Grade No. 2 or better Southern Pine, Douglas Fir; or PS 1, APA Exterior Grade plywood; pressure preservative treated.
 1. No pressure treated lumber with chromated copper arsenate (CCA) is acceptable.
 2. Nailers receiving fasteners for metal roof edges shall be minimum 2x6 nominal, solid lumber.
 3. Nailers shall be provided on all roofing sections in order to install the new roofing system and all flashing details per manufacturer's requirements.
- C. Stack Boots: Prefabricated flexible boot and collar for pipe stacks through membrane; same material as membrane.
- D. Surface Conditioner for Adhesives: Compatible with membrane and adhesives.
- E. Thinners and Cleaners: As recommended by adhesive manufacturer, compatible with membrane.
- F. Insulation Adhesive: As recommended by insulation manufacturer and as follows:
 1. Adhesive: A spray or extruded applied, two-component polyurethane, low-rise expanding foam adhesive used for attaching approved insulations to compatible substrates (concrete, cellular lightweight insulating concrete, gypsum, cementitious wood fiber, wood or steel) or existing smooth or gravel surfaced BUR, modified bitumen or cap sheets.
 2. Catalyst: Added to Adhesive to quicken adhesive reaction time.
- G. Fastening Components: As recommended by manufacturer and as follows:
 1. Deck Sheathing Screws:
 - a. Fastening Plate: Nominal 3 inch diameter FM approved metal plate.
- H. Sealants: As recommended by membrane manufacturer.
- I. Walkway Pads: Suitable for maintenance traffic, contrasting color or otherwise visually distinctive from roof membrane.
 1. Composition: Roofing membrane manufacturer's standard.
 2. Size: 30 by 30 inches.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that surfaces and site conditions are ready to receive work.
- B. Verify deck is supported and secure.
- C. Verify deck is clean and smooth, flat, free of depressions, waves, or projections, properly sloped and suitable for installation of roof system.
- D. Verify deck surfaces are dry and free of snow or ice.
- E. Verify that roof openings, curbs, and penetrations through roof are solidly set, and nailers are in place.
- F. Report in writing to Canzian/Johnston & Associates, LLC all prevailing conditions that will adversely affect satisfactory execution of work. Do not proceed with work until unsatisfactory conditions have been corrected.
 1. Starting work constitutes acceptance of the existing conditions and the Contractor shall be responsible for any delays or changes required to existing conditions at the Contractor's expense.

3.02 PREPARATION - GENERAL

- A. Remove all of the existing roof system down to the tapered lightweight fill including all existing composition base flashings. Dispose of all materials properly.

1. At penetrations, remove all existing flashings, including lead, asphalt, mastic, etc.
 2. At walls, curbs, and other vertical and sloped surfaces, remove loose and unsecured flashings; remove mineral surfaced and coated flashings; remove excessive asphalt to provide a smooth, sound surface for new flashings.
 3. The surface on which the insulation or roofing membrane is to be applied shall be clean, smooth, dry, and free of projections or contaminants that would prevent proper application of or be incompatible with the new installation, such as fins, sharp edges, foreign materials, oil and grease.
- B. Take appropriate measures to ensure that fumes from adhesive solvents are not drawn into the building through air intakes.
- C. Surfaces that require patching shall be patched to match existing adjacent surfaces in order to provide sound surfaces for roofing. Surfaces behind flashings shall be made solid and of uniform planarity so as not to harm membranes.
- D. Curbs that will not be a minimum of 8 inches in height off the finished roof surface shall be extended with new continuous nailers so that the 8 inch curb height off the finished roof surface shall be achieved.
- E. Existing electric, plumbing, HVAC lines, conduit, etc. shall be disconnected and reconnected in order to allow roofing work to proceed.
- F. Carpentry: Nailers shall be provided on all roofing sections in order to install the new roofing system and all flashing details per manufacturer's requirements.
1. Securement of Wood Nailers to Structural Concrete Roofs
 - a. Provide two staggered rows of fasteners fastened into the structural concrete deck with fasteners embedded a minimum of 1-1/4 inch. Space each row of fasteners as follows.
 - 1) Maximum Perimeter Spacing: 24 inches.
 - 2) Maximum Corner Spacing or End Spacing (10 feet from corner or exposed end of nailer): 24 inches.
 - b. Do not anchor nailers to lightweight concrete or gypsum toppings.
 2. Securement of Wood Members to Wood Nailers
 - a. Secure wood members, such as fascias and top nailers, up to nominal 8 inches wide to lower wood nailers using minimum number 8 screws or equivalent (minimum design withdrawal resistance of 80 pounds per fastener) in two staggered rows. Fasteners shall be long enough to penetrate minimum 1-1/2 inch into the lower wood nailer. Maximum of two nailers may be attached to lower bottom nailer with maximum fascia height of 13 inches. Space each row of fasteners as follows.
 - 1) Maximum Perimeter Spacing: 18 inches.
 - 2) Maximum Corner Spacing or End Spacing (10 feet from corner or exposed end of nailer): 12 inches.

3.03 PREPARATION - CONCRETE DECK

- A. Fill surface honeycomb and variations with latex filler.
- B. Install deck sheathing on tapered lightweight fill.
1. Lay with long side at right angle to flutes; stagger end joints; provide support at ends.
 2. Cut sheathing cleanly and accurately at roof breaks and protrusions to provide smooth surface.
- C. Mechanically fasten sheathing to roof deck (the underlying precast concrete plank, in accordance with roofing manufacturer's instructions).
1. Fastener rate for the field of the roof shall not be less than 10 fasteners per 4 foot by 8 foot board. Additional fasteners shall be required for perimeter and corner areas according to uplift calculations.
- D. A vapor retarder / temporary roof to be installed over entire roof area.

1. Apply vapor retarder/temporary roof to deck surface with adhesive and/or primers in accordance with manufacturer's instructions.
2. Temporary roof shall be weathertight.

3.04 PREPARATION - METAL DECK

- A. Install deck sheathing on metal deck.
 1. Lay with long side at right angle to flutes; stagger end joints; provide support at ends.
 2. Cut sheathing cleanly and accurately at roof breaks and protrusions to provide smooth surface.
- B. Mechanically fasten sheathing to roof deck, in accordance with roofing manufacturer's instructions.
 1. Fastener rate for the field of the roof shall not be less than 10 fasteners per 4 foot by 8 foot board. Additional fasteners shall be required for perimeter and corner areas according to uplift calculations.
- C. A vapor retarder / temporary roof to be installed over entire roof area.
 1. Apply vapor barrier/temporary roof to sheathing with adhesive and/or primers in accordance with manufacturer's instructions.
 2. Temporary roof shall be weathertight.

3.05 INSULATION - UNDER MEMBRANE

- A. Apply air barrier to deck surface with adhesive in accordance with manufacturer's instructions.
 1. Extend air barrier under blocking to deck edge.
- B. Ensure air barrier/temporary roof is clean and dry, continuous, and ready for application of insulation.
- C. Install insulation or membrane underlayment in multiple layers over the substrate with boards butted tightly together with no joints or gaps greater than 1/4 inch. Stagger joints both horizontally and vertically.
- D. Secure insulation to the substrate with the required insulation adhesive in accordance with the manufacturer's current application guidelines.
- E. Do not install wet, damaged or warped insulation boards.
- F. Stagger joints in one direction unless joints are to be taped. Install insulation boards snug. Gaps between board joints shall not exceed 1/4 inch. Fill all gaps in excess of 1/4 inch with same insulation material.
- G. Wood nailers must be at least 5 1/2 inches wide or 1 inch wider than adjacent metal flange unless noted otherwise. Thickness must equal that of insulation but not less than 1 inch thickness.
- H. Miter and fill the edges of the insulation boards at ridges, valleys and other changes in plane to prevent open joints or irregular surfaces. Avoid breaking or crushing of the insulation at the corners.
- I. Attachment of Insulation:
 1. Embed first layer of insulation in full bed of adhesive in accordance with roofing and insulation manufacturers' instructions.
 2. Install insulation layers after the first layer, maximum 4 feet by 4 feet, applied with adhesive, coverage rate as necessary to achieve the specified attachment and uplift rating. Press each board firmly into place after adhesive develops strings when touched and roll with a weighted roller. Add temporary weight and use relief cuts to ensure boards are well adhered. Stagger the joints of additional layers by a minimum of 6 inches.
 3. Enhance the perimeter and corner areas in accordance with the International Building Code, (ASCE 7) or ANSI/SPRI WD-1.
- J. Lay boards with edges in moderate contact without forcing. Cut insulation to fit neatly to perimeter blocking and around penetrations through roof.

- K. Do not apply more insulation than can be covered with membrane in same day.
- L. Install crickets and saddles as per the insulation layout.

3.06 INSTALLATION - MEMBRANE

- A. Install elastomeric membrane roofing system in accordance with manufacturer's recommendations for fully adhered application.
- B. Roll out membrane, free from wrinkles or tears. Place sheet into place without stretching.
- C. Allow the membrane to relax for approximately 1/2 hour before bonding. Fold the sheet back onto itself so half the underside of the membrane is exposed.
- D. Apply the Bonding Adhesive in accordance with the manufacturer's published instructions, to both the underside of the membrane and the substrate. Allow the adhesive to dry until it is tacky but will not string or stick to a dry finger touch.
- E. Roll the coated membrane into the coated substrate while avoiding wrinkles. Brush down the bonded half of the membrane sheet with a soft bristle push broom to achieve maximum contact.
- F. Fold back the unbonded half of the membrane sheet and repeat the bonding procedure.
- G. Install adjoining membrane sheets in the same manner, overlapping edges appropriately to provide for the minimum splice width.
- H. Shingle joints in direction of drainage.
- I. Membrane Splicing:
 - 1. Overlap adjacent sheets and mark a line 1/2 inch out from the top sheet.
 - 2. Fold the top sheet back and clean the dry splice area (minimum 2 1/2 inches) of both membrane sheets with Sure-Seal Primer as required by the membrane manufacturer.
 - 3. Where Splice Tape is not Factory-Applied, apply Splice Tape to bottom sheet with the edge of the release film along the marked line. Press tape onto the sheet using hand pressure. Overlap tape roll ends a minimum of 1 inch
 - 4. Remove the release film and press the top sheet onto the tape using hand pressure.
 - 5. Roll the seam toward the splice edge with a 2 inch wide steel roller.
 - 6. Install Pressure-Sensitive "T" Joint Cover, a 6 inch wide section of Pressure-Sensitive Flashing or Elastoform Flashing over all field splice intersections.
 - 7. When using non-Pressure-Sensitive Elastoform Flashing, seal edges of flashing with Lap Sealant.
 - 8. The use of Lap Sealant with tape splices is optional except at tape overlaps and cut edges of reinforced membrane where Lap Sealant is required.
- J. At intersections with vertical surfaces:
 - 1. Wall and curb flashing shall be cured EPDM membrane. Continue the deck membrane as wall flashing where practicable.
 - 2. Follow manufacturer's typical flashing procedures for all wall, curb, and penetration flashing including metal edging/coping and roof drain applications.
- K. At metal edges, extend membrane under metal edge and down the outside face of the wall.
- L. Coordinate installation of roof drains and sumps and related flashings.

3.07 INSTALLATION - WALKWAY PADS

- A. Install walkway pads at all traffic concentration points (such as roof hatches, access doors, rooftop ladders, etc.) and all locations as identified on the Contract Drawings. Space pad joints to permit drainage.
- B. Adhere walkways pads to the EPDM membrane in accordance with the manufacturer's current application guidelines.

3.08 DAILY SEALS

- A. On phased roofing, when the completion of flashings and terminations is not achieved by the end of the work day, a daily seal must be performed to temporarily close the membrane to prevent water infiltration.
- B. Use pourable sealer or other acceptable membrane seal in accordance with the manufacturer's requirements.

3.09 FIELD QUALITY CONTROL

- A. See Section 01 4000 - Quality Requirements for additional requirements.
- B. Westmoreland County Housing Authority will provide testing services, and Contractor to provide temporary construction and materials for testing in accordance with requirements.
- C. Require site attendance of roofing material manufacturers bi-weekly during installation of the Work.
- D. Inspection by Manufacturer: Provide final inspection of the roofing system by a Technical Representative employed by roofing system manufacturer specifically to inspect installation for warranty purposes (i.e. not a sales person).
- E. Perform all corrections necessary for issuance of warranty.

3.10 CLEANING

- A. See Section 01 7000 - Execution and Closeout Requirements for additional requirements.
- B. See Section 01 7419 - Construction Waste Management and Disposal for additional requirements.
- C. Perform daily clean-up to collect all wrappings, empty containers, paper, and other debris from the project site. Upon completion, all debris must be disposed of in a legally acceptable manner.
- D. Prior to the manufacturer's inspection for warranty, the applicator must perform a pre-inspection to review all work and to verify all flashing has been completed as well as the application of all caulking.
- E. Remove bituminous markings from finished surfaces.
- F. In areas where finished surfaces are soiled by work of this section, consult manufacturer of surfaces for cleaning advice and comply with their documented instructions.
- G. Repair or replace defaced or damaged finishes caused by work of this section.

3.11 PROTECTION

- A. Protect installed roofing and flashings from construction operations.
- B. Where traffic must continue over finished roof membrane, protect surfaces using durable materials.

END OF SECTION

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**SECTION 07 7123
MANUFACTURED GUTTERS AND DOWNSPOUTS**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Pre-finished aluminum conductor head and downspout.
- B. Precast concrete splash pads.

1.02 RELATED REQUIREMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division I Specification Sections, apply to this Section.
- B. Section 07 5300 - Elastomeric Membrane Roofing: Warranty requirements.

1.03 REFERENCE STANDARDS

1.04 DESIGN REQUIREMENTS

- A. Conform to SMACNA Architectural Sheet Metal Manual for sizing components for rainfall intensity determined by a storm occurrence of 1 in 5 years.
- B. Conform to applicable code for size and method of rain water discharge.

1.05 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide data on prefabricated components.
- C. Shop Drawings: Indicate locations, configurations, jointing methods, fastening methods, locations, and installation details.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Stack material to prevent twisting, bending, or abrasion, and to provide ventilation. Slope to drain.
- B. Prevent contact with materials that could cause discoloration, staining, or damage.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Basis of Design: Design is based upon products, materials and accessories as manufactured or approved for use by Carlisle Syntec Systems and the terminology used may include reference to proprietary products of that company.
 - 1. The various materials and products specified in the specifications by name or description are given to establish a standard of quality of workmanship and materials to be provided under this Section. It is not the intent to limit the bidder, the bid or the evaluation of the bid to any one material or product specified but rather to describe the minimum standard. A bid containing an alternative which does not meet the specifications will be declared non-responsive.
 - 2. Substitutions: See Section 01 6000 - Product Requirements.

2.02 COMPONENTS

- A. Gutters:
 - 1. Material: 0.063 inch aluminum.
 - 2. Size: 6-1/4 inch x 6-1/4 inch minimum.
 - 3. Roof Flange: 4 inch minimum.
 - 4. Attachment: Two piece extruded aluminum bracket mechanically fastened to roof edge nailers.
- B. Downspouts: Industrial Downspout-Closed.
 - 1. Material: 0.063 inch aluminum.
 - 2. Formed Lengths: 12'-0".

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3. Seams: Double Seam Lock.
4. Attachment Straps: U-shaped placed between wall and downspout and secured to the sides..
 - a. Width: 2".
 - b. Straps per 12-Foot Downspout Length: 3.
- C. Conductor Head: Welded.
 1. Material: 0.063" aluminum
 2. Flange: Fasten to wall, 2" wide.
- D. Fasteners: Stainless steel , with soft neoprene washers.

2.03 ACCESSORIES

- A. Splash Pads: Precast concrete type, size and profiles indicated; minimum 3000 psi at 28 days, with minimum 5 percent air entrainment.

2.04 FABRICATION

- A. Fabricate with required connection pieces.
- B. Form sections square, true, and accurate in size, in maximum possible lengths, free of distortion or defects detrimental to appearance or performance.
- C. Hem exposed edges of metal.

2.05 FINISHES

- A. Fluoropolymer Coating: High Performance Organic Finish, AAMA 2604; multiple coat, thermally cured fluoropolymer finish system; color as indicated.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify existing conditions before starting work.
- B. Verify that surfaces are ready to receive work.
- C. Report in writing to Canzian/Johnston & Associates, LLC all prevailing conditions that will adversely affect satisfactory execution of work. Do not proceed with work until unsatisfactory conditions have been corrected.
 1. Starting work constitutes acceptance of the existing conditions and the Contractor shall be responsible for any delays or changes required to existing conditions at the Contractor's expense.

3.02 INSTALLATION

- A. Install gutters, downspouts, and accessories in accordance with manufacturer's instructions.
- B. Install products to allow for thermal movement.
- C. Joint Sealants: Apply joint sealants in accordance with manufacturer's instructions.
- D. Review lengths of straight pieces before cutting to avoid creating relatively short sections adjacent to full-length sections.
- E. Isolate products from ACQ treated wood blocking or other galvanically incompatible material with appropriate membrane material.
- F. Set splash pads under downspouts.

3.03 CLEANING

- A. Clean products promptly after installation in accordance with manufacturer's instructions.
- B. Remove clear protective vinyl film.
- C. Do not use harsh cleaning materials or methods that could damage finish.

3.04 PROTECTION

- A. Protect installed products to ensure that, except for normal weathering, products will be without damage or deterioration at time of Substantial Completion.

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**SECTION 07 7200
ROOF ACCESSORIES**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Manufactured equipment rails.
- B. Roof penetrations mounting curbs.
- C. Non-penetrating pedestals.

1.02 RELATED REQUIREMENTS

- A. Drawings and general provisions of the Contract, including General and Supplemental Conditions and other Division 1 Specification Sections, apply to this Section.
- B. Section 07 5300 - Elastomeric Membrane Roofing.
- C. Section 07 7123 - Manufactured Gutters and Downspouts.

1.03 REFERENCE STANDARDS

- A. ASTM A123/A123M - Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products; 2017.
- B. ASTM A153/A153M - Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware; 2009.

1.04 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Product Data: Manufacturer's data sheets on each product to be used.
 - 1. Preparation instructions and recommendations.
 - 2. Storage and handling requirements and recommendations.
 - 3. Installation methods.
- C. Shop Drawings: Submit detailed layout developed for this project and provide dimensioned location and number for each type of roof accessory.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Store products in manufacturer's unopened packaging until ready for installation.
- B. Store products under cover and elevated above grade.

PART 2 PRODUCTS

2.01 CURBS, EQUIPMENT RAILS, AND OTHER ROOF MOUNTING ASSEMBLIES

- A. Curbs, Equipment Rails, and Other Roof Mounting Assemblies: Factory-assembled hollow sheet metal construction with fully mitered and welded corners, integral counterflashing, internal reinforcing, and top side and edges formed to shed water.
 - 1. Two-sided curbs in straight lengths, with top horizontal for equipment mounting.
 - a. Provide preservative treated wood nailers along top of rails.
 - 2. Sheet Metal: Hot-dip zinc coated steel sheet complying with ASTM A653/A653M, SS Grade 33; G60 coating designation; 18 gage, 0.048 inch thick.
 - 3. Manufacture rail bottom and mounting flanges for installation directly on roof deck, not on insulation; match slope and configuration of roof deck.
 - 4. Height Above Finished Roof Surface: 8 inches, minimum.

2.02 NON-PENETRATING ROOFTOP SUPPORTS/ASSEMBLIES

- A. Non-Penetrating Rooftop Support/Assemblies: Manufacturer-engineered and factory-fabricated, with pedestal bases that rest on top of roofing membrane, and not requiring any attachment to roof structure and not penetrating roofing assembly.
 - 1. Design Loadings and Configurations: As required by applicable codes.

2. Support Spacing and Base Sizes: As required to distribute load sufficiently to prevent indentation of roofing assembly.
3. Steel Components: Stainless steel, or carbon steel hot-dip galvanized after fabrication in accordance with ASTM A123/A123M.
4. Hardware, Bolts, Nuts, and Washers: Stainless steel, or carbon steel hot-dip galvanized after fabrication in accordance with ASTM A153/A153M.
5. Manufacturers:
 - a. PHP Systems/Design: www.phpsd.com/#sle.
 - b. Eaton: www.cooperblin.com.
 - c. Substitutions: See Section 01 6000 - Product Requirements.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Do not begin installation until substrates have been properly prepared.
- B. Verify deck is supported and secure.
- C. Verify deck surfaces are dry and free of snow or ice.
- D. Notify Canzian/Johnston & Associates LLC in writing of conditions detrimental to proper and timely completion of work. Do not proceed with erection until unsatisfactory conditions have been corrected.
 1. Starting work constitutes acceptance of the existing conditions and the Contractor shall be responsible for any delays or changes required to existing conditions at the Contractor's expense.

3.02 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using methods recommended by manufacturer for achieving acceptable results for applicable substrate under project conditions.

3.03 INSTALLATION

- A. Install in accordance with manufacturer's instructions, in manner that maintains roofing system weather-tight integrity.

3.04 CLEANING

- A. Clean installed work to like-new condition.

3.05 PROTECTION

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

END OF SECTION

SECTION 07 9200 JOINT SEALANTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Nonsag gunnable joint sealants.
- B. Joint backings and accessories.

1.02 RELATED REQUIREMENTS

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

1.03 REFERENCE STANDARDS

- A. ASTM C920 - Standard Specification for Elastomeric Joint Sealants; 2014.
- B. ASTM C1193 - Standard Guide for Use of Joint Sealants; 2013.
- C. ASTM C1311 - Standard Specification for Solvent Release Sealants; 2014.
- D. SCAQMD 1168 - Adhesive and Sealant Applications; 1989, with Amendment (2022).

1.04 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements for submittal procedures.
- B. Product Data: Submit manufacturer's technical datasheets for each product to be used; include the following:
 - 1. Physical characteristics, including movement capability, VOC content, hardness, cure time, and color availability.
 - 2. List of backing materials approved for use with the specific product.
 - 3. Substrates that product is known to satisfactorily adhere to and with which it is compatible.
 - 4. Substrates the product should not be used on.
 - 5. Substrates for which use of primer is required.
 - 6. Substrates for which laboratory adhesion and/or compatibility testing is required.
 - 7. Installation instructions, including precautions, limitations, and recommended backing materials and tools.
 - 8. Sample product warranty.
- C. Product Data for Accessory Products: Submit manufacturer's technical data sheet for each product to be used, including physical characteristics, installation instructions, and recommended tools.
- D. Color Cards for Selection: Where sealant color is not specified, submit manufacturer's color cards showing standard colors available for selection.

PART 2 PRODUCTS

2.01 JOINT SEALANT APPLICATIONS

- A. Scope:
 - 1. Exterior Joints:
 - a. Do not seal exterior joints unless indicated on drawings as sealed.
 - b. Seal the following joints:
 - 1) Wall expansion and control joints.
 - 2) Joints between doors, windows, and other frames or adjacent construction.
 - 3) Joints between different exposed materials.
 - 2. Do Not Seal:
 - a. Intentional weep holes in masonry.
 - b. Joints indicated to be covered with expansion joint cover assemblies.
 - c. Joints where sealant is specified to be furnished and installed by manufacturer of product to be sealed.

- d. Joints where sealant installation is specified in other sections.
- B. Exterior Joints: Use non-sag Ultra-low-modulus, one-part, neutral-cure silicone sealant, unless otherwise indicated.
 - 1. Lap Joints in Sheet Metal Fabrications: Butyl rubber, non-curing.

2.02 JOINT SEALANTS - GENERAL

- A. Sealants and Primers: Provide products having lower volatile organic compound (VOC) content than indicated in SCAQMD 1168.

2.03 NONSAG JOINT SEALANTS

- A. Non-Staining Silicone Sealant: ASTM C920, Grade NS, Uses T, NT, M, G, A, and O; not expected to withstand continuous water immersion or traffic.
 - 1. Movement Capability: Plus 100 and minus 50, minimum.
 - 2. Dirt Pick-Up: Reduced dirt pick-up compared to other silicone sealants.
 - 3. Color: Match adjacent finished surfaces.
 - 4. Products:
 - a. Basis of Design: Design is based upon the use of Dowsil 790 Silicone Building Sealant as manufactured by Dow Corning Corporation (www.dowcorning.com). The terminology used may include reference to proprietary products of that company.
 - 1) Construe such reference as establishing only the quality of workmanship and materials to be provided under this Section, and not as limiting competition.
 - b. Other Acceptable Manufacturers:
 - 1) Sika Corporation: www.usa-sika.com/#sle.
 - 2) Tremco Commercial Sealants & Waterproofing: www.tremcosealants.com/#sle.
 - c. Substitutions: See Section 01 6000 - Product Requirements.
- B. Non-Curing Butyl Sealant: Solvent-based; ASTM C1311; single component, non-sag, non-skinning, non-hardening, non-bleeding; vapor-impermeable; intended for fully concealed applications.

2.04 ACCESSORIES

- A. Backing Tape: Self-adhesive polyethylene tape with surface that sealant will not adhere to and recommended by tape and sealant manufacturers for specific application.
- B. Masking Tape: Self-adhesive, nonabsorbent, nonstaining, removable without adhesive residue, and compatible with surfaces adjacent to joints and sealants.
- C. Joint Cleaner: Noncorrosive and nonstaining type, type recommended by sealant manufacturer; compatible with joint forming materials.
- D. Primers: Type recommended by sealant manufacturer to suit application; nonstaining.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that joints are ready to receive work.
- B. Verify that backing materials are compatible with sealants.
- C. Notify Canzian/Johnston & Associates, LLC in writing of conditions detrimental to proper and timely completion of work. Do not proceed with erection until unsatisfactory conditions have been corrected.
 - 1. Starting work constitutes acceptance of the existing conditions and the Contractor shall be responsible for any delays or changes required to existing conditions at the Contractor's expense.

3.02 PREPARATION

- A. Remove loose materials and foreign matter that could impair adhesion of sealant.
- B. Clean joints, and prime as necessary, in accordance with manufacturer's instructions.
- C. Perform preparation in accordance with manufacturer's instructions and ASTM C1193.

- D. Mask elements and surfaces adjacent to joints from damage and disfigurement due to sealant work; be aware that sealant drips and smears may not be completely removable.

3.03 INSTALLATION

- A. Install this work in accordance with sealant manufacturer's requirements for preparation of surfaces and material installation instructions.
- B. Provide joint sealant installations complying with ASTM C1193.
- C. Measure joint dimensions and size joint backers to achieve width-to-depth ratio, neck dimension, and surface bond area as recommended by manufacturer.
- D. Install bond breaker backing tape where backer rod cannot be used.
- E. Install sealant free of air pockets, foreign embedded matter, ridges, and sags, and without getting sealant on adjacent surfaces.
- F. Do not install sealant when ambient temperature is outside manufacturer's recommended temperature range, or will be outside that range during the entire curing period, unless manufacturer's approval is obtained and instructions are followed.
- G. Nonsag Sealants: Tool surface concave, unless otherwise indicated; remove masking tape immediately after tooling sealant surface.

3.04 CLEANING

- A. Clean adjacent soiled surfaces.

3.05 PROTECTION

- A. Protect sealants until cured.

END OF SECTION

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SECTION 08 0671
DOOR HARDWARE SCHEDULE

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Preliminary schedule of door hardware sets for swinging as indicated on drawings.

1.02 RELATED REQUIREMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division I Specification Sections, apply to this Section.
- B. Section 08 7100 - Door Hardware: Requirements to comply with in coordination with this section.

1.03 REFERENCE STANDARDS

- A. DHI (H&S) - Sequence and Format for the Hardware Schedule; 2019.

1.04 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Product Data: Manufacturer's product data sheets including installation details, material descriptions, dimensions of individual components and profiles, operational descriptions and finishes.
- C. Door Hardware Schedule: Prepared by or under the supervision of supplier, detailing fabrication and assembly of door hardware, as well as procedures and diagrams. Coordinate the final Door Hardware Schedule with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of door hardware.
 - 1. Format: Comply with scheduling sequence and vertical format in DHI (H&S).
 - 2. Organization: Organize the Door Hardware Schedule into door hardware sets indicating complete designations of every item required for each door or opening. Organize door hardware sets in same order as in the Door Hardware Sets at the end of Part 3. Submittals that do not follow the same format and order as the Door Hardware Sets will be rejected and subject to resubmission.
 - 3. Content: Include the following information:
 - a. Type, style, function, size, label, hand, and finish of each door hardware item.
 - b. Manufacturer of each item.
 - c. Fastenings and other pertinent information.
 - d. Location of door hardware set, cross-referenced to Drawings, both on floor plans and in door and frame schedule.
 - e. Explanation of abbreviations, symbols, and codes contained in schedule.
 - f. Mounting locations for door hardware.
 - g. Door and frame sizes and materials.
 - 4. Submittal Sequence: Submit the final Door Hardware Schedule at earliest possible date, particularly where approval of the Door Hardware Schedule must precede fabrication of other work that is critical in the Project construction schedule. Include Product Data, Samples, Shop Drawings of other work affected by door hardware, and other information essential to the coordinated review of the Door Hardware Schedule.
- D. Keying Schedule: Prepared under the supervision of the Owner, separate schedule detailing final keying instructions for locksets and cylinders in writing. Include keying system explanation, door numbers, key set symbols, hardware set numbers and special instructions. Owner to approve submitted keying schedule prior to the ordering of permanent cylinders.
- E. Product Test Reports: Indicating compliance with cycle testing requirements, based on evaluation of comprehensive tests performed by manufacturer and witnessed by a qualified independent testing agency.

- F. Operating and Maintenance Manuals: Provide manufacturers operating and maintenance manuals for each item comprising the complete door hardware installation in quantity as required in Division 01, Closeout Submittals. The manual to include the name, address, and contact information of the manufacturers providing the hardware and their nearest service representatives. The final copies delivered after completion of the installation test to include "as built" modifications made during installation, checkout, and acceptance.
- G. Warranties and Maintenance: Special warranties and maintenance agreements specified in the Related Sections.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Inventory door hardware on receipt and provide secure lock-up and shelving for door hardware delivered to Project site. Do not store electronic access control hardware, software or accessories at Project site without prior authorization.
- B. Tag each item or package separately with identification related to the final Door Hardware Schedule, and include basic installation instructions with each item or package.
- C. Deliver, as applicable, permanent keys, cylinders, cores, access control credentials, software and related accessories directly to Owner via registered mail or overnight package service. Instructions for delivery to the Owner shall be established at the "Keying Conference".

1.06 WARRANTY

- A. General Warranty: Reference Division 01, General Requirements. Special warranties specified in this Article shall not deprive Owner of other rights Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by Contractor under requirements of the Contract Documents.

1.07 MAINTENANCE SERVICE

- A. Maintenance Tools and Instructions: Furnish a complete set of specialized tools and maintenance instructions as needed for Owner's continued adjustment, maintenance, and removal and replacement of door hardware.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Only manufacturers listed in Door Hardware Schedule or Section 08 7100 are considered acceptable, unless noted otherwise.
- B. Obtain each type of door hardware as indicated from a single manufacturer and single supplier.
- C. Manufacturer's Abbreviations: Coordinate with manufacturers listed in Section 08 7100.
 - 1. MK - McKinney.
 - 2. NO - Norton.
 - 3. PE - Pemko.
 - 4. RO - Rockwood.
 - 5. RU - Corbin Russwin.

PART 3 EXECUTION

3.01 DOOR HARDWARE SETS

- A. The door hardware sets represent the design intent and direction of the owner and architect. They are a guideline only and should not be considered a detailed hardware schedule. Discrepancies, conflicting hardware and missing items should be brought to the attention of the architect with corrections made prior to the bidding process. Omitted items not included in a hardware set should be scheduled with the appropriate additional hardware required for proper application and functionality.
 - 1. Quantities listed are for each pair of doors, or for each single door.
 - 2. The supplier is responsible for handing and sizing all products.
 - 3. Where multiple options for a piece of hardware are given in a single line item, the supplier shall provide the appropriate application for the opening.

4. At existing openings with new hardware the supplier shall field inspect existing conditions prior to the submittal stage to verify the specified hardware will work as required. Provide alternate solutions and proposals as needed.

HARDWARE SETS

Set: 1.0

For use on door to roof.

3	Hinge, Full Mortise, INT	TA 2714 (NRP)	US26D	MK
1	Storeroom Lock	CLX3357 NZD CTSD	626	RU
1	Interchangeable Core	Compatible with Owner's keying system	626	RU
1	Surface Closer with Stop Arm	UNI7500	689	NO
1	Kick Plate	K1050 48" high CSK BEV	US32D	RO
1	Gasketing	S88 (Head & Jambs)	---	PE
1	Sweep	18061CNB		PE
1	Threshold	273x224AFGT		PE

END OF SECTION

**SECTION 08 1113
HOLLOW METAL DOORS AND FRAMES**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Fire-rated hollow metal doors and frames.

1.02 RELATED REQUIREMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division I Specification Sections, apply to this Section.
- B. Section 08 7100 - Door Hardware.
- C. Section 09 9123 - Interior Painting: Field painting.

1.03 REFERENCE STANDARDS

- A. ADA Standards - 2010 ADA Standards for Accessible Design; 2010.
- B. ANSI/SDI A250.4 - Test Procedure and Acceptance Criteria for Physical Endurance for Steel Doors, Frames and Frame Anchors; 2011.
- C. ANSI/SDI A250.6 - Recommended Practice for Hardware Reinforcing on Standard Steel Doors and Frames; 2003 (R2009).
- D. ANSI/SDI A250.8 - Specifications for Standard Steel Doors and Frames (SDI-100); 2014.
- E. ANSI/SDI A250.10 - Test Procedure and Acceptance Criteria for Prime Painted Steel Surfaces for Steel Doors and Frames; 2011.
- F. ANSI/SDI A250.11 - Recommended Erection Instructions for Steel Frames; 2012.
- G. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process; 2023.
- H. ASTM A1008/A1008M - Standard Specification for Steel, Sheet, Cold-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, Solution Hardened, and Bake Hardenable; 2015.
- I. ASTM A1011/A1011M - Standard Specification for Steel, Sheet and Strip, Hot-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, and Ultra-High Strength; 2014.
- J. BHMA A156.115 - American National Standard for Hardware Preparation in Steel Doors and Steel Frames; 2014.
- K. ICC A117.1 - Accessible and Usable Buildings and Facilities; 2009.
- L. NAAMM HMMA 830 - Hardware Selection for Hollow Metal Doors and Frames; 2002.
- M. NAAMM HMMA 831 - Hardware Locations for Hollow Metal Doors and Frames; 2011.
- N. NAAMM HMMA 840 - Guide Specifications for Installation and Storage of Hollow Metal Doors and Frames; 2007.
- O. NAAMM HMMA 861 - Guide Specifications for Commercial Hollow Metal Doors and Frames; 2006.
- P. NFPA 80 - Standard for Fire Doors and Other Opening Protectives; 2016.
- Q. NFPA 105 - Standard for Smoke Door Assemblies and Other Opening Protectives; 2025.
- R. NFPA 252 - Standard Methods of Fire Tests of Door Assemblies; 2012.
- S. SDI 117 - Manufacturing Tolerances for Standard Steel Doors and Frames; 2013.
- T. UL (DIR) - Online Certifications Directory; Current Edition.
- U. UL 10C - Standard for Positive Pressure Fire Tests of Door Assemblies; Current Edition, Including All Revisions.

- V. UL 1784 - Standard for Air Leakage Tests of Door Assemblies; Current Edition, Including All Revisions.

1.04 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Product Data: Materials and details of design and construction, hardware locations, reinforcement type and locations, anchorage and fastening methods, and finishes; and one copy of referenced standards/guidelines.
- C. Shop Drawings: Include the following:
 - 1. Elevations of each door design.
 - 2. Details of doors, including vertical and horizontal edge details and metal thicknesses.
 - 3. Frame details for each frame type, including dimensioned profiles and metal thicknesses.
 - 4. Locations of reinforcement and preparations for hardware.
 - 5. Details of anchorages, joints, field splices, and connections.
 - 6. Details of accessories.
- D. Installation Instructions: Manufacturer's published instructions, including any special installation instructions relating to this project.

1.05 QUALITY ASSURANCE

- A. Source Limitations: Obtain hollow metal doors and frames through one source from a single manufacturer wherever possible.
- B. Fire-Rated Door Assemblies: Assemblies complying with NFPA 80 that are listed and labeled by a qualified testing agency, for fire-protection ratings indicated, based on testing at positive pressure according to UL 10C (neutral pressure at 40 inches above sill) or UL 10C.
 - 1. Smoke Control Door Assemblies: Comply with NFPA 105.
 - a. Smoke "S" Label: Doors to bear "S" label, and include smoke and draft control gasketing applied to frame and on meeting stiles of pair doors.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Comply with NAAMM HMMA 840 or ANSI/SDI A250.8 (SDI-100) in accordance with specified requirements.
- B. Deliver hollow metal work palletized, wrapped, or crated to provide protection during transit and Project site storage. Do not use non-vented plastic.
 - 1. Protect with resilient packaging; avoid humidity build-up under coverings; prevent corrosion and adverse effects on factory applied painted finish.
- C. Deliver welded frames with two removable spreader bars across bottom of frames, tack welded to jambs and mullions.
- D. Store hollow metal work under cover at Project site. Place in stacks of five units maximum in a vertical position with heads up, spaced by blocking, on minimum 4-inch high wood blocking. Do not store in a manner that traps excess humidity.
 - 1. Provide minimum 1/4-inch space between each stacked door to permit air circulation. Door and frames to be stacked in a vertical upright position.

1.07 PROJECT CONDITIONS

- A. Field Measurements: Verify actual dimensions of openings by field measurements before fabrication.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Hollow Metal Doors and Frames:
 - 1. Ceco Door, an Assa Abloy Group company: www.assaabloydss.com/#sle.
 - 2. Curries, an Assa Abloy Group company: www.assaabloydss.com/#sle.
 - 3. Substitutions: See Section 01 6000 - Product Requirements.

2.02 PERFORMANCE REQUIREMENTS

- A. Requirements for Hollow Metal Doors and Frames:
1. Steel Sheet: Comply with one or more of the following requirements; galvanized steel complying with ASTM A653/A653M, cold-rolled steel complying with ASTM A1008/A1008M, or hot-rolled pickled and oiled (HRPO) steel complying with ASTM A1011/A1011M, commercial steel (CS) Type B, for each.
 2. Accessibility: Comply with ICC A117.1 and ADA Standards.
 3. Door Top Closures: Flush end closure channel, with top and door faces aligned.
 4. Door Edge Profile: Manufacturers standard for application indicated.
 5. Typical Door Face Sheets: Flush.
 6. Hardware Preparations, Selections and Locations: Comply with NAAMM HMMA 830 and NAAMM HMMA 831 or BHMA A156.115 and ANSI/SDI A250.8 (SDI-100) in accordance with specified requirements.
 7. Zinc Coating for Typical Interior and/or Exterior Locations: Provide metal components zinc-coated (galvanized) and/or zinc-iron alloy-coated (galvanized) by the hot-dip process in accordance with ASTM A653/A653M, with manufacturer's standard coating thickness, unless noted otherwise for specific hollow metal doors and frames.
 - a. Based on SDI Standards: Provide A60/ZF180 (galvanized), coating not required for typical interior door applications unless noted otherwise, and at least A60/ZF180 (galvanized) for corrosive locations.
- B. Combined Requirements: If a particular door and frame unit is indicated to comply with more than one type of requirement, comply with the specified requirements for each type; for instance, an exterior door that is also indicated as being sound-rated must comply with the requirements specified for exterior doors and for sound-rated doors; where two requirements conflict, comply with the most stringent.

2.03 HOLLOW METAL DOORS

- A. Fire-Rated Doors:
1. Based on SDI Standards: ANSI/SDI A250.8 (SDI-100).
 - a. Level 2 - Heavy-duty.
 - b. Physical Performance Level B 500 000 cycles; in accordance with ANSI/SDI A250.4.
 - c. Model 2 - Seamless.
 - d. Door Face Metal Thickness: 18 gage, 0.042 inch, minimum.
 2. Fire Rating: As indicated on Door Schedule, tested in accordance with UL 10C and NFPA 252 ("positive pressure fire tests").
 3. Provide units listed and labeled by UL (DIR).
 - a. Attach fire rating label to each fire rated unit.
 4. Smoke and Draft Control Doors (Indicated with letter "S" on Drawings and/or Door Schedule): Self-closing or automatic closing doors in accordance with NFPA 80 and NFPA 105, with fire-resistance-rated wall construction rated the same or greater than the fire-rated doors, and the following;
 - a. Maximum Air Leakage: 3.0 cfm/sq ft of door opening at 0.10 inch w.g. pressure, when tested in accordance with UL 1784 at both ambient and elevated temperatures.
 - b. Gasketing: Provide gasketing or edge sealing as necessary to achieve leakage limit.
 - c. Label: Include the "S" label on fire-rating label of door.
 5. Door Core Material: Manufacturers standard core material/construction in compliance with requirements.
 6. Door Thickness: 1-3/4 inch, nominal.
 7. Door Finish: Factory primed and field finished.
 8. Top and Bottom Edges: Reinforce tops and bottoms of doors with a continuous steel channel not less than 16 gauge, extending the full width of the door and welded to the face sheet. Doors with an inverted top channel to include a steel closure channel, screw attached, with the web of the channel flush with the face sheets of the door. Plastic or composite channel fillers are not acceptable.

9. Hinge Reinforcement: Minimum 7 gauge (3/16 inch) plate 1-1/4 inch by 9 inch or minimum 14 gauge continuous channel with pierced holes, drilled and tapped.
10. Hardware Reinforcements: Fabricate according to ANSI/SDI A250.6 with reinforcing plates from same material as door face sheets.

2.04 HOLLOW METAL FRAMES

- A. Comply with standards and/or custom guidelines as indicated for corresponding door in accordance with applicable door frame requirements.
- B. Door Frames, Fire-Rated: Face welded type.
 1. Fire Rating: Fabricate frames in accordance with NFPA 80, listed and labeled by a qualified testing agency, for fire-protection ratings indicated.
 2. Frame Metal Thickness: 16 gage, 0.053 inch, minimum.
 3. Frame Finish: Factory primed and field finished.

2.05 FINISHES

- A. Primer: Rust-inhibiting, complying with ANSI/SDI A250.10, door manufacturer's standard.

2.06 ACCESSORIES

- A. Frame Anchors:
 1. Jamb Anchors:
 - a. Masonry Type: Adjustable strap-and-stirrup or T-shaped anchors to suit frame size, formed from A60 metallic coated material, not less than 0.042 inch thick, with corrugated or perforated straps not less than 2 inches wide by 10 inches long; or wire anchors not less than 0.177 inch thick.
 - b. Stud Wall Type: Designed to engage stud and not less than 0.042 inch thick.
 2. Floor Anchors: Floor anchors to be provided at each jamb, formed from A60 metallic coated material, not less than 0.042 inches thick.
- B. Mortar Guards: Formed from same material as frames, not less than 0.016 inches thick.
- C. Stops and Moldings: Provide stops and moldings around glazed lites where indicated. Form corners of stops and moldings with butted or mitered hairline joints at fabricator's shop. Fixed and removable stops to allow multiple glazed lites each to be removed independently. Coordinate frame rabbet widths between fixed and removable stops with the type of glazing and installation indicated.
- D. Fixed Frame Moldings: Formed integral with hollow metal frames, a minimum of 5/8 inch (16 mm) high unless otherwise indicated. Provide fixed frame moldings and stops on outside of exterior and on secure side of interior doors and frames.
- E. Temporary Frame Spreaders: Provide for factory- or shop-assembled frames.

2.07 FABRICATION

- A. Fabricate hollow metal work to be rigid and free of defects, warp, or buckle. Accurately form metal to required sizes and profiles, with minimum radius for thickness of metal. Where practical, fit and assemble units in manufacturer's plant. When shipping limitations so dictate, frames for large openings are to be fabricated in sections for splicing or splining in the field by others.
- B. Tolerances: Fabricate hollow metal work to tolerances indicated in ANSI/SDI A250.8.
- C. Hollow Metal Doors:
 1. Exterior Doors: Provide optional weep-hole openings in bottom of exterior doors to permit moisture to escape where specified.
 2. Glazed Lites: Factory cut openings in doors with applied trim or kits to fit. Factory install glazing where indicated.
 3. Astragals: Provide overlapping astragals as noted in door hardware sets in Division 08 Section "Door Hardware" on one leaf of pairs of doors where required by NFPA 80 for fire-performance rating or where indicated. Extend minimum 3/4 inch beyond edge of door on which astragal is mounted.

4. Continuous Hinge Reinforcement: Provide welded continuous 12 gauge strap for continuous hinges specified in hardware sets in Division 08 Section "Door Hardware".
- D. Hollow Metal Frames:
1. Shipping Limitations: Where frames are fabricated in sections due to shipping or handling limitations, provide alignment plates or angles at each joint, fabricated of same thickness metal as frames.
 2. Welded Frames: Weld flush face joints continuously; grind, fill, dress, and make smooth, flush, and invisible.
 - a. Welded frames are to be provided with two steel spreaders temporarily attached to the bottom of both jambs to serve as a brace during shipping and handling. Spreader bars are for bracing only and are not to be used to size the frame opening.
 3. Sidelight and Transom Bar Frames: Provide closed tubular members with no visible face seams or joints, fabricated from same material as door frame. Fasten members at crossings and to jambs by butt welding.
 4. High Frequency Hinge Reinforcement: Provide high frequency hinge reinforcements at door openings 48-inches and wider with mortise butt type hinges at top hinge locations.
 5. Continuous Hinge Reinforcement: Provide welded continuous 12 gauge straps for continuous hinges specified in hardware sets in Division 08 Section "Door Hardware".
 6. Provide countersunk, flat- or oval-head exposed screws and bolts for exposed fasteners unless otherwise indicated for removable stops, provide security screws at exterior locations.
 7. Mortar Guards: Provide guard boxes at back of hardware mortises in frames at all hinges and strike preps regardless of grouting requirements.
 8. Floor Anchors: Weld anchors to bottom of jambs and mullions with at least four spot welds per anchor.
 9. Jamb Anchors: Provide number and spacing of anchors as follows:
 - a. Masonry Type: Locate anchors not more than 18 inches from top and bottom of frame. Space anchors not more than 32 inches on-center and as follows:
 - 1) Two anchors per jamb up to 60 inches high.
 - 2) Three anchors per jamb from 60 to 90 inches high.
 - 3) Four anchors per jamb from 90 to 120 inches high.
 - 4) Four anchors per jamb plus 1 additional anchor per jamb for each 24 inches or fraction thereof above 120 inches high.
 - b. Stud Wall Type: Locate anchors not more than 18 inches from top and bottom of frame. Space anchors not more than 32 inches o.c. and as follows:
 - 1) Three anchors per jamb up to 60 inches high.
 - 2) Four anchors per jamb from 60 to 90 inches high.
 - 3) Five anchors per jamb from 90 to 96 inches high.
 - 4) Five anchors per jamb plus 1 additional anchor per jamb for each 24 inches or fraction thereof above 96 inches high.
 - 5) Two anchors per head for frames above 42 inches wide and mounted in metal stud partitions.
- E. Hardware Preparation: Factory prepare hollow metal work to receive template mortised hardware; include cutouts, reinforcement, mortising, drilling, and tapping according to the Door Hardware Schedule and templates furnished as specified in Division 08 Section "Door Hardware."
1. Locate hardware as indicated, or if not indicated, according to ANSI/SDI A250.8.
 2. Reinforce doors and frames to receive non-template, mortised and surface mounted door hardware.
 3. Comply with applicable requirements in ANSI/SDI A250.6 and ANSI/DHI A115 Series specifications for preparation of hollow metal work for hardware.
 4. Coordinate locations of conduit and wiring boxes for electrical connections.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify existing conditions before starting work.
- B. Verify that opening sizes and tolerances are acceptable.
 - 1. General Contractor to verify the accuracy of dimensions given to the steel door and frame manufacturer for existing openings or existing frames (strike height, hinge spacing, hinge back set, etc.).
- C. Verify that finished walls are in plane to ensure proper door alignment.
- D. Report in writing to Canzian/Johnston & Associates, LLC all prevailing conditions that will adversely affect satisfactory execution of work. Do not proceed with work until unsatisfactory conditions have been corrected.
 - 1. Starting work constitutes acceptance of the existing conditions and the Contractor shall be responsible for any delays or changes required to existing conditions at the Contractor's expense.

3.02 INSTALLATION

- A. Install doors and frames in accordance with manufacturer's instructions and related requirements of specified door and frame standards or custom guidelines indicated.
- B. Hollow Metal Frames: Install hollow metal frames of size and profile indicated. Comply with ANSI/SDI A250.11 and NFPA 80 at fire rated openings.
 - 1. Coordinate frame anchor placement with wall construction.
 - 2. Set frames accurately in position, plumbed, leveled, aligned, and braced securely until permanent anchors are set. After wall construction is complete and frames properly set and secured, remove temporary braces, leaving surfaces smooth and undamaged. Shim as necessary to comply with installation tolerances.
 - 3. Floor Anchors: Provide floor anchors for each jamb and mullion that extends to floor, and secure with post-installed expansion anchors.
- C. Hollow Metal Doors: Fit hollow metal doors accurately in frames, within clearances specified below. Shim as necessary.
 - 1. Fire-Rated Doors: Install doors with clearances according to NFPA 80.
- D. Install door hardware as specified in Section 08 7100.

3.03 TOLERANCES

- A. Clearances Between Door and Frame: Comply with related requirements of specified frame standards or custom guidelines indicated in accordance with SDI 117 or NAAMM HMMA 861.
- B. Maximum Diagonal Distortion: 1/16 inch measured with straight edge, corner to corner.

3.04 ADJUSTING AND CLEANING

- A. Adjust for smooth and balanced door movement.
- B. Final Adjustments: Check and readjust operating hardware items immediately before final inspection. Leave work in complete and proper operating condition. Remove and replace defective work, including hollow metal work that is warped, bowed, or otherwise unacceptable.
- C. Prime-Coat and Painted Finish Touchup: Immediately after erection, sand smooth rusted or damaged areas of prime coat, or painted finishes, and apply touchup of compatible air drying, rust-inhibitive primer, zinc rich primer (exterior and galvanized openings) or finish paint.

3.05 FIELD QUALITY CONTROL

- A. Field Inspection (Punch Report): Reference Division 01 Sections "Closeout Procedures". Produce project punch report for each installed door opening indicating compliance with approved submittals and verification hardware is properly installed, operating and adjusted. Include list of items to be completed and corrected, indicating the reasons or deficiencies causing the Work to be incomplete or rejected.

1. Organization of List: Include separate Door Opening and Deficiencies and Corrective Action Lists organized by Mark, Opening Remarks and Comments, and related Opening Images and Video Recordings.

END OF SECTION

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**SECTION 08 6200
UNIT SKYLIGHTS**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Skylights with integral frame.
- B. Integral insulated curb.

1.02 RELATED REQUIREMENTS

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

1.03 REFERENCE STANDARDS

- A. AAMA/WDMA/CSA 101/I.S.2/A440 - North American Fenestration Standard/Specification for windows, doors, and skylights; 2011.
- B. ASTM B209/B209M - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate; 2021a.
- C. ASTM B221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes; 2014.
- D. ASTM B221M - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes [Metric]; 2013.
- E. ASTM D1003 - Standard Test Method for Haze and Luminous Transmittance of Transparent Plastics; 2021.
- F. ASTM E2112 - Standard Practice for Installation of Exterior Windows, Doors and Skylights; 2007.
- G. NFRC 100 - Procedure for Determining Fenestration Product U-factors; 2014.
- H. NFRC 200 - Procedure for Determining Fenestration Product Solar Heat Gain Coefficient and Visible Transmittance at Normal Incidence; 2014.

1.04 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements for submittal procedures.
- B. Product Data: Include structural, thermal, and daylighting performance values.
- C. Shop Drawings: Indicate configurations, dimensions, locations, fastening methods, and installation details.

1.05 QUALITY ASSURANCE

1.06 WARRANTY

- A. See Section 01 7800 - Closeout Submittals for additional warranty requirements.
- B. Manufacturer Warranty: Coverage for skylight materials and construction shall be included as part of the edge to edge warranty provided as part of Section 07 5300 - Elastomeric Membrane Roofing.

PART 2 PRODUCTS

2.01 BASIS OF DESIGN

- A. Basis of Design: Sunweld Plus Conventional Skylight (Dynamic Dome Skylight), products, materials and accessories as manufactured or approved for use by Carlisle Roofing Systems, Inc. (www.carlisle-syntec.com) and the terminology used may include reference to proprietary products of that company.

1. The various materials and products specified in the specifications by name or description are given to establish a standard of quality of workmanship and materials to be provided under this Section. It is not the intent to limit the bidder, the bid or the evaluation of the bid to any one material or product specified but rather to describe the minimum standard. A bid containing an alternative which does not meet the specifications will be declared non-responsive.
2. Substitutions: See Section 01 6000 - Product Requirements.

2.02 SKYLIGHTS

- A. Skylights: Factory-assembled glazing in aluminum frame, free of visual distortion, and weathertight.
 1. Shape: Square dome.
 2. Glazing: Double.
 3. Operation: None; fixed.
 4. Nominal Size: As indicated on drawings; verify existing sizes in the field.

2.03 PERFORMANCE REQUIREMENTS

- A. Provide unit skylights that comply with the following:
 1. Grade: AAMA/WDMA/CSA 101/I.S.2/A440 requirements for specific skylight type:
 - a. Performance Grade (PG): 35, with minimum design pressure (DP) of 35.0 psf.
 2. Allow for expansion and contraction within system components caused by a cycling surface temperature range of 170 degrees F without causing detrimental effects to system or components.

2.04 COMPONENTS

- A. Double Glazing: Polycarbonate plastic; factory sealed.
 1. Outer Glazing: Clear transparent.
 2. Inner Glazing: White prismatic.
 3. Luminous Transmittance ASTM D1003: 61.1 percent.
 4. U-Factor NFRC 100: 0.71.
 5. SHGC NFRC 200: 0.46.
 6. Haze ASTM D1003: 100 percent.
- B. Frames: ASTM B221 ASTM B221M Extruded aluminum thermally broken, reinforced and welded corner joints, integral curb frame mounting flange and counterflashing to receive roofing flashing system, with integral condensation collection gutter, glazing retainer; mill finish.
- C. Support Curbs: Sheet aluminum ASTM B209/B209M, sandwich construction; 1 inch wide, 16 inches high; rigid foam insulation; with integral flange for anchorage to roof deck.

PART 3 EXECUTION

3.01 PREPARATION

- A. Apply protective back coating on aluminum surfaces of skylight units that will be in contact with cementitious materials or dissimilar metals.

3.02 INSTALLATION

- A. Install unit skylights in accordance with manufacturer's instructions and ASTM E2112.
- B. Install aluminum curb assembly, fastening securely to roof decking; flash curb assembly into roofing system.
- C. Install skylight units and mount securely to curb assembly; install counterflashing as required.
- D. Apply sealant to achieve watertight assembly.

3.03 CLEANING

- A. Remove protective material from prefinished aluminum surfaces.
- B. Wash down exposed surfaces; wipe surfaces clean.

C. Remove excess sealant.

END OF SECTION

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**SECTION 08 7100
DOOR HARDWARE**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Hardware for fire-rated doors.
- B. Lock cylinders for access doors.
- C. Thresholds.

1.02 RELATED REQUIREMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division I Specification Sections, apply to this Section.
- B. Section 08 0671 - Door Hardware Schedule: Schedule of door hardware sets.

1.03 REFERENCE STANDARDS

- A. ADA Standards - 2010 ADA Standards for Accessible Design; 2010.
- B. BHMA (CPD) - Certified Products Directory; Current Edition.
- C. BHMA A156.1 - American National Standard for Butts and Hinges; 2013.
- D. BHMA A156.2 - American National Standard for Bored and Preamsembled Locks & Latches; 2011.
- E. BHMA A156.4 - American National Standard for Door Controls - Closers; 2013.
- F. BHMA A156.5 - American National Standard for Cylinders and Input Devices for Locks; 2014.
- G. BHMA A156.6 - American National Standard for Architectural Door Trim; 2010.
- H. BHMA A156.7 - American National Standard for Template Hinge Dimensions; 2014.
- I. BHMA A156.13 - American National Standard for Mortise Locks & Latches Series 1000; 2012.
- J. BHMA A156.18 - American National Standard for Materials and Finishes; 2012.
- K. BHMA A156.21 - American National Standard for Thresholds; 2014.
- L. BHMA A156.22 - American National Standard for Door Gasketing and Edge Seal Systems, Builders Hardware Manufacturers Association; 2012.
- M. BHMA A156.28 - Standard for Recommended Practices for Mechanical Keying Systems; 2023.
- N. BHMA A156.36 - Auxiliary Locks; 2020.
- O. BHMA A156.115 - American National Standard for Hardware Preparation in Steel Doors and Steel Frames; 2014.
- P. DHI (H&S) - Sequence and Format for the Hardware Schedule; 2019.
- Q. DHI (KSN) - Keying Systems and Nomenclature; 1989.
- R. ICC A117.1 - Accessible and Usable Buildings and Facilities; 2009.
- S. ITS (DIR) - Directory of Listed Products; Current Edition.
- T. NFPA 80 - Standard for Fire Doors and Other Opening Protectives; 2016.
- U. NFPA 101 - Life Safety Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
- V. NFPA 105 - Standard for Smoke Door Assemblies and Other Opening Protectives; 2025.
- W. NFPA 252 - Standard Methods of Fire Tests of Door Assemblies; 2012.
- X. UL (DIR) - Online Certifications Directory; Current Edition.
- Y. UL 10C - Standard for Positive Pressure Fire Tests of Door Assemblies; Current Edition, Including All Revisions.

1.04 ADMINISTRATIVE REQUIREMENTS

- A. Keying Requirements Meeting:
 - 1. Attendance Required:
 - a. Contractor.
 - b. Westmoreland County Housing Authority.
 - c. Installer's Architectural Hardware Consultant (AHC).
 - d. Hardware Installer.
 - 2. Agenda:
 - a. Establish keying requirements.
 - b. Verify locksets and locking hardware are functionally correct for project requirements.
 - c. Verify that keying and programming complies with project requirements.
 - d. Establish keying submittal schedule and update requirements.
 - 3. Incorporate "Keying Requirements Meeting" decisions into keying submittal upon review of door hardware keying system including, but not limited to, the following:
 - a. Key control system requirements.
 - 4. Contractor shall record minutes and distribute copies within two days after meeting to participants, with two copies to Canzian/Johnston & Associates, LLC, Westmoreland County Housing Authority, participants, and those affected by decisions made.
 - 5. Deliver established keying requirements to manufacturers.
- B. Templates: Obtain and distribute to the parties involved templates for doors, frames, and other work specified to be factory prepared for installing standard and electrified hardware. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing hardware to comply with indicated requirements.

1.05 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements for submittal procedures.
- B. Product Data: Manufacturer's catalog literature for each type of hardware, marked to clearly show products to be furnished for this project, and includes construction details, material descriptions, finishes, and dimensions and profiles of individual components.
- C. Shop Drawings - Door Hardware Schedule: Submit detailed listing that includes each item of hardware to be installed on each door. Use door numbering scheme as included in Contract Documents.
 - 1. Prepared by or under supervision of Architectural Hardware Consultant (AHC).
 - 2. Comply with DHI (H&S) using door numbers and hardware set numbers as indicated in construction documents.
 - a. Submit in vertical format.
 - 3. List groups and suffixes in proper sequence.
 - 4. Provide complete description for each door listed.
 - 5. Provide manufacturer name, product names, and catalog numbers; include functions, types, styles, sizes and finishes of each item.
 - 6. Include account of abbreviations and symbols used in schedule.
 - 7. Coordinate the final Door Hardware Schedule with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of door hardware.
 - 8. Organization: Organize the Door Hardware Schedule into door hardware sets indicating complete designations of every item required for each door or opening. Organize door hardware sets in same order as in Section 08 0671. Submittals that do not follow the same format and order as the Door Hardware Sets will be rejected and subject to resubmission.
 - 9. Content: Include the following information:
 - a. Type, style, function, size, label, hand, and finish of each door hardware item.
 - b. Manufacturer of each item.
 - c. Fastenings and other pertinent information.

- d. Location of door hardware set, cross-referenced to Drawings, both on floor plans and in door and frame schedule.
 - e. Explanation of abbreviations, symbols, and codes contained in schedule.
 - f. Mounting locations for door hardware.
 - g. Door and frame sizes and materials.
 - h. Warranty information for each product.
10. Submittal Sequence: Submit the final Door Hardware Schedule at earliest possible date, particularly where approval of the Door Hardware Schedule must precede fabrication of other work that is critical in the Project construction schedule. Include Product Data, Samples, Shop Drawings of other work affected by door hardware, and other information essential to the coordinated review of the Door Hardware Schedule.
- D. Manufacturer's Installation Instructions: Indicate special procedures.
- E. Maintenance Data: Include data on operating hardware, lubrication requirements, and inspection procedures related to preventative maintenance.
- 1. Submit manufacturer's parts lists and templates.
 - 2. Bitting List: List of combinations as furnished.
- F. Keying Schedule: After a keying meeting with the owner has taken place prepare a separate keying schedule detailing final instructions. Submit the keying schedule in electronic format. Include keying system explanation, door numbers, key set symbols, hardware set numbers and special instructions. Owner must approve submitted keying schedule prior to the ordering of permanent cylinders/cores.
- G. Installer's Qualification Statement.
- H. Maintenance Materials and Tools: Furnish the following for Westmoreland County Housing Authority's use in maintenance of project.
- 1. See Section 01 6000 - Product Requirements, for additional provisions.
 - 2. Tools: One set of each special wrench or tool applicable for each different or special hardware component, whether supplied by hardware component manufacturer or not.

1.06 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section with minimum three years of documented experience.
- 1. Cylinder manufacturer to have minimum (10) years experience designing secured master key systems and have on record a published security keying system policy.
- B. Installer Qualifications: Company specializing in performing work of the type specified for commercial door hardware with at least three years of documented experience.
- 1. Installers are to be trained and certified by the manufacturer on the proper installation and adjustment of fire, life safety, and security products including: hanging devices; locking devices; closing devices; and seals.
- C. Supplier Qualifications: Company with certified Architectural Hardware Consultant (AHC) to assist in work of this section.
- 1. Experienced commercial door hardware distributors with a minimum 5 years documented experience supplying both mechanical and electromechanical hardware installations comparable in material, design, and extent to that indicated for this Project. Supplier recognized as a factory direct distributor by the manufacturers of the primary materials with a warehousing facility in Project's vicinity, within 100 miles.
- D. Source Limitations: Obtain each type and variety of door hardware specified in this section from a single source unless otherwise indicated.
- E. Each unit to bear third party permanent label demonstrating compliance with the referenced standards.

1.07 DELIVERY, STORAGE, AND HANDLING

- A. Inventory door hardware on receipt and provide secure lock-up and shelving for door hardware delivered to Project site. Do not store electronic access control hardware, software or accessories at Project site without prior authorization.
- B. Package hardware items individually; label and identify each package with door opening code to match door hardware schedule. Include basic installation instructions with each item or package.
- C. Deliver, as applicable, permanent keys, cylinders, cores, access control credentials, software and related accessories directly to Owner via registered mail or overnight package service. Instructions for delivery to the Owner shall be established at the "Keying Conference".

1.08 WARRANTY

- A. See Section 01 7800 - Closeout Submittals for additional warranty requirements.
- B. General Warranty: Reference Division 01, General Requirements. Special warranties specified in this Article shall not deprive Owner of other rights Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by Contractor under requirements of the Contract Documents.
- C. Warranty Period: Written warranty, executed by manufacturer(s), agreeing to repair or replace components of standard and electrified door hardware that fails in materials or workmanship within specified warranty period after final acceptance by the Owner. Failures include, but are not limited to, the following:
 - 1. Structural failures including excessive deflection, cracking, or breakage.
 - 2. Faulty operation of the hardware.
 - 3. Deterioration of metals, metal finishes, and other materials beyond normal weathering.
 - 4. Electrical component defects and failures within the systems operation.
- D. Standard Warranty Period: One year from date of Substantial Completion, unless otherwise indicated.
- E. Special Warranty Periods:
 - 1. Seven years for heavy duty cylindrical (bored) locks and latches.

PART 2 PRODUCTS

2.01 DESIGN AND PERFORMANCE CRITERIA

- A. Provide specified door hardware as required to make doors fully functional, compliant with applicable codes, and secure to extent indicated.
- B. Provide individual items of single type, of same model, and by same manufacturer.
- C. Designations: Requirements for quantity, item, size, finish or color, grade, function, and other distinctive qualities of each type of door hardware are indicated in the Door Hardware Sets. Products are identified by using door hardware designations, as follows:
 - 1. Named Manufacturer's Products: Product designation and manufacturer are listed for each door hardware type required for the purpose of establishing requirements. Manufacturers' names are abbreviated in the Door Hardware Schedule.
- D. Provide door hardware products that comply with the following requirements:
 - 1. Applicable provisions of federal, state, and local codes.
 - 2. Accessibility: ADA Standards and ICC A117.1.
 - 3. Applicable provisions of NFPA 101.
 - 4. Fire-Rated Doors: NFPA 80, listed and labeled by qualified testing agency for fire protection ratings indicated, based on testing at positive pressure in accordance with NFPA 252 or UL 10C.
 - 5. Hardware on Fire-Rated Doors: Listed and classified by UL (DIR), ITS (DIR), or testing firm acceptable to authorities having jurisdiction as suitable for application indicated.
 - 6. Listed and certified compliant with specified standards by BHMA (CPD).

7. Hardware Preparation for Steel Doors and Steel Frames: BHMA A156.115.
- E. Lock Function: Provide lock and latch function numbers and descriptions of manufacturer's series. Refer to Shop Drawing submittal of Door Hardware Schedule.
- F. Fasteners:
 1. Provide fasteners of proper type, size, quantity, and finish that comply with commercially recognized standards for proposed applications.
 - a. Aluminum fasteners are not permitted.
 - b. Provide phillips flat-head screws with heads finished to match door surface hardware unless otherwise indicated.
 2. Fire-Rated Applications: Comply with NFPA 80.
 - a. Provide wood or machine screws for hinges mortised to doors or frames, strike plates to frames, and closers to doors and frames.
 - b. Provide steel through bolts for attachment of surface mounted closers, hinges, or exit devices to door panels unless proper door blocking is provided.

2.02 BUTT HINGES

- A. Basis of Design: Design is based on the use of McKinney (MK) - TA/T4A Series, and the terminology used may include reference to proprietary products of that company.
 1. Construe such reference as establishing only the quality of workmanship and materials to be provided under this Section, and not as limiting competition.
 2. Substitutions: See Section 01 6000 - Product Requirements.
- B. Hinges: Comply with BHMA A156.1, butt hinges with number of hinge knuckles and other options as specified in the Door Hardware Sets.
 1. Butt Hinges: Comply with BHMA A156.1 and BHMA A156.7 for templated hinges.
 - a. Provide hinge width required to clear surrounding trim.
 2. Provide hinges on every swinging door.
 3. Provide five-knuckle full mortise butt hinges unless otherwise indicated.
 4. Provide non-removable pins on on all out-swinging lockable doors.
 - a. Non-removable Pins: Provide set screw in hinge barrel that, when tightened into a groove in hinge pin, prevents removal of pin while door is closed
 5. Hinge Size: Provide the following, unless otherwise indicated, with hinge widths sized for door thickness and clearances required:
 - a. Widths up to and including 3 feet: 4-1/2 inches standard or heavy weight as specified.
 - b. Sizes from greater than 3 feet and up to 4 feet: 5 inches standard or heavy weight as specified.
 6. Hinge Weight and Base Material: Unless otherwise indicated, provide the following:
 - a. Exterior Doors: Heavy weight, non-ferrous, ball bearing or oil impregnated bearing hinges unless Hardware Sets indicate standard weight.
 - b. Interior Doors: Standard weight, steel, ball bearing or oil impregnated bearing hinges unless Hardware Sets indicate heavy weight.
 7. Provide following quantity of butt hinges for each door:
 - a. Doors up to 60 inches High: Two hinges.
 - b. Doors From 60 inches High up to 90 inches High: Three hinges.
 - c. Doors 90 inches High up to 120 inches High: Four hinges.
 - d. Doors over 120 inches High: Four hinges, plus one additional hinge per each additional 30 inches in height greater than 120 inches.

2.03 LOCK CYLINDERS

- A. General: Cylinder manufacturer to have minimum (10) years experience designing secured master key systems and have on record a published security keying system policy.
- B. Cylinder Types: Original manufacturer cylinders able to supply the following cylinder formats and types:

1. Cylinder Types: Original manufacturer cylinders able to supply the following cylinder formats and types:
 - a. Threaded mortise cylinders with rings and cams to suit hardware application.
 - b. Rim cylinders with back plate, flat-type vertical or horizontal tailpiece, and raised trim ring.
 - c. Bored or cylindrical lock cylinders with tailpieces as required to suit locks.
 - d. Tubular deadlocks and other auxiliary locks.
 - e. Mortise and rim cylinder collars to be solid and recessed to allow the cylinder face to be flush and be free spinning with matching finishes.
 - f. Keyway: Manufacturer's Standard.
- C. Provide cams and/or tailpieces as required for locking devices.

2.04 CYLINDRICAL LOCKS

- A. Basis of Design: Design is based upon the use of Corbin Russwin Hardware (RU) - CLX3300 Series as manufactured by Corbin Russwin Hardware (RU) (www.corbinrusswin.com). The terminology used may include reference to proprietary products of that company.
 1. Construe such reference as establishing only the quality of workmanship and materials to be provided under this Section, and not as limiting competition.
 2. Substitutions: See Section 01 6000 - Product Requirements.
- B. Cylindrical Locksets (Heavy Duty): Comply with BHMA A156.2, Grade 1 Certified Products Directory (CPD), 4000 Series listed cylindrical locksets.
 1. Locks are to be non-handed and fully field reversible.
 2. Latchbolt Throw: 1/2 inch, minimum (3/4" at rated paired openings).
 - a. Material: Brass or stainless steel latchbolt
 3. Backset: 2-3/4 inch unless otherwise indicated.
 - a. Backset shall be field verified in the field prior to ordering locksets.
 4. Bores: Bores shall be adjusted and trimmed for new locksets to allow installation.
 5. Strikes: Provide a new strike for each latchset suited to existing frame conditions.
 - a. Finish: To match lock or latch.
 - b. Strike suitability shall be field verified in the field prior to ordering locksets.
 - c. Standards: Comply with the following:
 - 1) Strikes for Mortise Locks and Latches: BHMA A156.13.
 - 2) Strikes for Bored Locks and Latches: BHMA A156.2.
 - 3) Strikes for Auxiliary Deadlocks: BHMA A156.36.

2.05 CLOSERS

- A. All door closers specified herein shall meet or exceed the following criteria:
 1. General: Door closers to be from one manufacturer, matching in design and style, with the same type door preparations and templates regardless of application or spring size. Closers to be non-handed with full sized covers including installation and adjusting information on inside of cover.
 2. Standards: Closers to comply with UL 10C for Positive Pressure Fire Test and be UL (DIR) listed for use of fire rated doors.
 3. Size of Units: Comply with manufacturer's written recommendations for sizing of door closers depending on size of door, exposure to weather, and anticipated frequency of use. Where closers are indicated for doors required to be accessible to the physically handicapped, provide units complying with ICC A117.1.
 4. Closer Arms: Provide heavy duty, forged steel closer arms unless otherwise indicated in Hardware Sets.
 5. Closers shall not be installed on exterior or corridor side of doors; where possible install closers on door for optimum aesthetics.
 6. Closer Accessories: Provide door closer accessories including custom templates, special mounting brackets, spacers and drop plates as required for proper installation. Provide through-bolt and security type fasteners as specified in the hardware sets.

- B. Door Closers, Surface Mounted (Heavy Duty): Comply with BHMA A156.4, Grade 1.
 - 1. Basis of Design: Design is based on the use of Norton Rixson (NO) - 7500 Series, and the terminology used may include reference to proprietary products of that company.
 - a. Construe such reference as establishing only the quality of workmanship and materials to be provided under this Section, and not as limiting competition.
 - b. Substitutions: See Section 01 6000 - Product Requirements.
 - 2. Type: Surface mounted to door.
 - 3. Provide spring power adjustment, sizes 1 thru 6, and fully operational adjustable according to door size, frequency of use, and opening force.
 - 4. Closers to be rack and pinion type, one piece cast iron or aluminum alloy body construction, with adjustable backcheck and separate non-critical valves for closing sweep and latch speed control.
 - 5. Provide non-handed units standard.
- C. Door Closers, Surface Mounted (Heavy Duty): Comply with BHMA A156.4, Grade 1 Certified Products Directory (CPD) listed surface mounted closers with door stop mechanism to absorb dead stop shock on arm and top hinge. Hold-open arms to have a spring loaded mechanism in addition to shock absorber assembly. Arms to be provided with rigid steel main arm and secondary arm lengths proportional to the door width.
 - 1. Basis of Design: Design is based on the use of Norton Rixson (NO) - Unitrol Series, and the terminology used may include reference to proprietary products of that company.
 - a. Construe such reference as establishing only the quality of workmanship and materials to be provided under this Section, and not as limiting competition.
 - b. Substitutions: See Section 01 6000 - Product Requirements.

2.06 PROTECTION PLATES

- A. Basis of Design: Design is based on the use of Rockwood (RO), and the terminology used may include reference to proprietary products of that company.
 - 1. Construe such reference as establishing only the quality of workmanship and materials to be provided under this Section, and not as limiting competition.
 - 2. Substitutions: See Section 01 6000 - Product Requirements.
- B. Protection Plates: Comply with BHMA A156.6 certified protection plates (kick, armor, or mop).
- C. Size: Fabricate protection plates (kick, armor, or mop) not more than 2 inches less than door width (LDW) on stop side of single doors and 1 inch LDW on stop side of pairs of doors, and not more than 1 inch less than door width on pull side. Coordinate and provide proper width and height as required where conflicting hardware dictates. Height to be as specified in the Hardware Sets.
- D. Where plates are applied to fire rated doors with the top of the plate more than 16 inches above the bottom of the door, provide plates complying with NFPA 80. Consult manufacturer's catalog and template book for specific requirements for size and applications.
- E. Metal Properties: Stainless steel, 300 grade.
 - 1. Metal, Standard Duty: Thickness 0.050 inch, minimum.
- F. Edges: Beveled, on four sides unless otherwise indicated.
- G. Fasteners: Provide manufacturer's designated fastener type as specified in the Hardware Sets. Countersunk screw fasteners.

2.07 THRESHOLDS

- A. Thresholds: Comply with BHMA A156.21.
 - 1. Provide threshold at each exterior door, unless otherwise indicated.
 - 2. Type: Flat surface.
 - 3. Material: Aluminum.
 - 4. Threshold Surface: Fluted horizontal grooves across full width.
 - 5. Field cut threshold to profile of frame and width of door sill for tight fit.
 - 6. Provide non-corroding fasteners at exterior locations.

2.08 ARCHITECTURAL SEALS

- A. Basis of Design: Design is based on the use of Pemko (PE), and the terminology used may include reference to proprietary products of that company.
 - 1. Construe such reference as establishing only the quality of workmanship and materials to be provided under this Section, and not as limiting competition.
 - 2. Substitutions: See Section 01 6000 - Product Requirements.
- B. Weatherstripping and Gasketing: Comply with BHMA A156.22.
 - 1. General: Thresholds, weatherstripping, and gasket seals to be of type and design as specified below or in the Hardware Sets. Provide continuous weatherstrip gasketing on exterior doors and provide smoke, light, or sound gasketing on interior doors where indicated. At exterior applications provide non-corrosive fasteners and elsewhere where indicated.
 - 2. Smoke Labeled Gasketing: Assemblies complying with NFPA 105 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction
 - a. Provide gasketing for smoke and draft control doors (Indicated as "S" on Drawings) that complies with local codes, requirements of assemblies tested in accordance with UL 1784.
 - 3. Fire Labeled Gasketing: Assemblies complying with NFPA 80 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for fire ratings indicated, based on testing according to UL 10C.
 - a. Provide intumescent seals as indicated to meet UL 10C Standard for Positive Pressure Fire Tests of Door Assemblies, and NFPA 252, Standard Methods of Fire Tests of Door Assemblies.
 - 4. Replaceable Seal Strips: Provide only those units where resilient or flexible seal strips are easily replaceable and readily available from stocks maintained by manufacturer.

2.09 LOCK AND LATCH STRIKES

- A. Strikes: Provide manufacturer's standard strike with strike box for each latch or lock bolt, with curved lip extended to protect frame, finished to match door hardware set, unless otherwise indicated, and as follows:
 - 1. Flat-Lip Strikes: For locks with three-piece antifriction latchbolts, as recommended by manufacturer.
 - 2. Extra-Long-Lip Strikes: For locks used on frames with applied wood casing trim.
 - 3. Aluminum-Frame Strike Box: Provide manufacturer's special strike box fabricated for aluminum framing.
 - 4. Double-lipped strikes: For locks at double acting doors. Furnish with retractable stop for rescue hardware applications.
- B. Standards: Comply with the following:
 - 1. Strikes for Mortise Locks and Latches: BHMA A156.13.
 - 2. Strikes for Bored Locks and Latches: BHMA A156.2.
 - 3. Strikes for Auxiliary Deadlocks: BHMA A156.36.

2.10 KEY CONTROL SYSTEMS

- A. Key Control Systems: Comply with guidelines of BHMA A156.28.
 - 1. Provide keying information in compliance with DHI (KSN) standards.
 - 2. Existing System: Field verify and key cylinders to match Owner's existing system.
 - 3. Include construction keying and control keying with removable core cylinders.
 - 4. Supply keys in following minimum quantities:
 - a. 6 each Construction Master keys.
 - b. 2 each Construction Control keys.
 - c. 2 each Change keys per keyed core.
 - 5. Key Management System: For each keyed lock on project, provide one set of consecutively numbered duplicate key tags with hanging hole and snap catch.

6. Deliver keys with identifying tags to Westmoreland County Housing Authority by security shipment direct from hardware supplier.
7. Permanent Keys and Cores: Stamped with applicable key marking for identification. Do not include actual key cuts within visual key control marks or codes. Stamp permanent keys "Do Not Duplicate."
8. Key Registration List (Bitting List):
 - a. Provide keying transcript list to Owner's representative in the proper format for importing into key control software.
 - b. Provide transcript list in writing or electronic file as directed by the Owner.

2.11 FABRICATION

- A. Fasteners: Provide door hardware manufactured to comply with published templates generally prepared for machine, wood, and sheet metal screws. Provide screws according to manufacturers recognized installation standards for application intended.

2.12 FINISHES

- A. Standard: Designations used in the Hardware Sets and elsewhere indicate hardware finishes complying with BHMA A156.18, including coordination with traditional U.S. finishes indicated by certain manufacturers for their products.
- B. Provide quality of finish, including thickness of plating or coating (if any), composition, hardness, and other qualities complying with manufacturer's standards, but in no case less than specified by referenced standards for the applicable units of hardware
- C. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that doors and frames are ready to receive this work; labeled, fire-rated doors and frames are properly installed, and dimensions are as indicated on shop drawings.
- B. Report in writing to Canzian/Johnston & Associates, LLC all prevailing conditions that will adversely affect satisfactory execution of work. Do not proceed with work until unsatisfactory conditions have been corrected.
 1. Starting work constitutes acceptance of the existing conditions and the Contractor shall be responsible for any delays or changes required to existing conditions at the Contractor's expense.

3.02 INSTALLATION

- A. Install hardware in accordance with manufacturer's instructions and applicable codes.
- B. Install hardware on fire-rated doors and frames in accordance with applicable codes and NFPA 80.
- C. Install hardware for smoke and draft control doors in accordance with NFPA 105.
- D. Use templates provided by hardware item manufacturer.
- E. Door Hardware Mounting Heights: Distance from finished floor to center line of hardware item.
 1. Mounting heights in compliance with ADA Standards.

3.03 FIELD QUALITY CONTROL

- A. Perform field inspection and testing under provisions of Section 01 4000 - Quality Requirements.
- B. Provide an Architectural Hardware Consultant (AHC) to inspect installation and certify that hardware and installation has been furnished and installed in accordance with manufacturer's instructions and as specified.
 1. Include whether door hardware is properly installed, operating and adjusted.

3.04 ADJUSTING

- A. Initial Adjustment: Adjust and check each operating item of door hardware and each door to ensure proper operation or function of every unit. Replace units that cannot be adjusted to operate as intended. Adjust door control devices to compensate for final operation of heating and ventilating equipment and to comply with referenced accessibility requirements.
- B. Adjust hardware for smooth operation.
- C. Adjust gasketing for complete, continuous seal; replace if unable to make complete seal.

3.05 CLEANING

- A. Clean finished hardware in accordance with manufacturer's written instructions after final adjustments have been made.
- B. Clean adjacent surfaces soiled by hardware installation.
- C. Clean operating items as necessary to restore proper finish. Provide final protection and maintain conditions that ensure door hardware is without damage or deterioration at time of owner occupancy.
- D. Replace items that cannot be cleaned to manufacturer's level of finish quality at no additional cost.

3.06 PROTECTION

- A. Do not permit adjacent work to damage hardware or finish.

3.07 DEMONSTRATION AND TRAINING

- A. Instruct Owner's maintenance personnel to adjust, operate, and maintain all door hardware.
- B. Be prepared to answer questions raised by training attendees; if unable to answer during training session, provide written response within three days.

3.08 DOOR HARDWARE SETS

- A. The hardware sets represent the design intent and direction of the owner and architect. They are a guideline only and should not be considered a detailed hardware schedule. Discrepancies, conflicting hardware and missing items should be brought to the attention of the architect with corrections made prior to the bidding process. Omitted items not included in a hardware set should be scheduled with the appropriate additional hardware required for proper application and functionality.
- B. The supplier is responsible for handing and sizing all products and providing the correct option for the appropriate door type and material where more than one is presented in the hardware sets. Quantities listed are for each pair of doors, or for each single door.
- C. Refer to Section 08 0671 - Door Hardware Schedule, for hardware sets.

END OF SECTION

**SECTION 09 9113
EXTERIOR PAINTING**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Surface preparation.
- B. Field application of paints.
- C. Scope: Finish exterior surfaces exposed to view, unless fully factory-finished and unless otherwise indicated, including the following:
- D. Do Not Paint or Finish the Following Items:
 - 1. Items factory-finished unless otherwise indicated; materials and products having factory-applied primers are not considered factory finished.
 - 2. Items indicated to receive other finishes.
 - 3. Items indicated to remain unfinished.
 - 4. Fire rating labels, equipment serial number and capacity labels, and operating parts of equipment.
 - 5. Floors, unless specifically indicated.
 - 6. Glass.
 - 7. Concealed pipes, ducts, and conduits.

1.02 RELATED REQUIREMENTS

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

1.03 REFERENCE STANDARDS

- A. 40 CFR 59, Subpart D - National Volatile Organic Compound Emission Standards for Architectural Coatings; U.S. Environmental Protection Agency; Current Edition.
- B. SSPC-SP 3 - Power Tool Cleaning; 2018.

1.04 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide complete list of products to be used, with the following information for each:
 - 1. Manufacturer's name, product name and/or catalog number, and general product category (e.g. "alkyd enamel").
- C. Samples: Submit three paper "draw down" samples, 8-1/2 by 11 inches in size, illustrating range of colors available for each finishing product specified.
 - 1. Where sheen is specified, submit samples in only that sheen.
- D. Manufacturer's Instructions: Indicate special surface preparation procedures and substrate conditions requiring special attention.
- E. Maintenance Materials: Furnish the following for Westmoreland County Housing Authority's use in maintenance of project.
 - 1. See Section 01 6000 - Product Requirements, for additional provisions.
 - 2. Extra Paint and Finish Materials: 5 gallons of each color and type; from the same product run, store where directed.
 - 3. Label each container with color in addition to the manufacturer's label.

1.05 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing the products specified, with minimum five (5) years documented experience.
- B. Applicator Qualifications: Company specializing in performing the type of work specified with minimum five (5) years documented experience.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Deliver products to site in sealed and labeled containers; inspect to verify acceptability.
- B. Container Label: Include manufacturer's name, type of paint, brand name, lot number, brand code, coverage, surface preparation, drying time, cleanup requirements, color designation, and instructions for mixing and reducing.
- C. Paint Materials: Store at minimum ambient temperature of 45 degrees F and a maximum of 90 degrees F, in ventilated area, and as required by manufacturer's instructions.

1.07 FIELD CONDITIONS

- A. Do not apply materials when surface and ambient temperatures are outside the temperature ranges required by the paint product manufacturer.
- B. Follow manufacturer's recommended procedures for producing best results, including testing of substrates, moisture in substrates, and humidity and temperature limitations.
- C. Do not apply exterior paint and finishes during rain or snow, or when relative humidity is outside the humidity ranges required by the paint product manufacturer.
- D. Minimum Application Temperatures for Latex Paints: 50 degrees F for exterior; unless required otherwise by manufacturer's instructions.
- E. Provide lighting level of 80 ft candles measured mid-height at substrate surface.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Provide paints and finishes used in any individual system from the same manufacturer; no exceptions.
- B. Basis of Design: Design is based upon the use of products and materials as manufactured by Sherwin-Williams Company (www.sherwin-williams.com). The terminology used may include reference to proprietary products of that company.
 - 1. Construe such reference as establishing only the quality of workmanship and materials to be provided under this Section, and not as limiting competition.
 - 2. Substitutions: See Section 01 6000 - Product Requirements.
- C. Primer Sealers: Same manufacturer as top coats.

2.02 PAINTS AND FINISHES - GENERAL

- A. Paints and Finishes: Ready mixed, unless required to be a field-catalyzed paint.
 - 1. Do not reduce, thin, or dilute paint or finishes or add materials unless such procedure is specifically described in manufacturer's product instructions.
- B. Volatile Organic Compound (VOC) Content:
 - 1. Provide paints and finishes that comply with the most stringent requirements specified in the following:
 - a. 40 CFR 59, Subpart D--National Volatile Organic Compound Emission Standards for Architectural Coatings.
 - b. Ozone Transport Commission (OTC) Model Rule, Architectural, Industrial, and Maintenance Coatings; www.otcair.org; specifically:
 - 1) Opaque, Flat: 50 g/L, maximum.
 - 2) Opaque, Nonflat: 150 g/L, maximum.
 - 3) Opaque, High Gloss: 250 g/L, maximum.
 - c. Architectural coatings VOC limits of Pennsylvania.
 - 2. Determination of VOC Content: Testing and calculation in accordance with 40 CFR 59, Subpart D (EPA Method 24), exclusive of colorants added to a tint base and water added at project site; or other method acceptable to authorities having jurisdiction.
- C. Sheens: Provide the sheens specified; where sheen is not specified, sheen will be selected later by Canzian/Johnston & Associates, LLC from the manufacturer's full line.

- D. Colors: As indicated in Color Schedule.
 - 1. Allow for minimum of three colors for each system, unless otherwise indicated, without additional cost to Westmoreland County Housing Authority.
 - 2. Extend colors to surface edges; colors may change at any edge as directed by Canzian/Johnston & Associates, LLC.

2.03 PAINT SYSTEMS - EXTERIOR

- A. PVC, Plastic (due to the variety of plastics, check for compatibility), 3 Coat:
 - 1. Primer: Extreme Bonding Primer.
 - 2. First Coat: VinylSafe Technology Finish, Duration Exterior Acrylic Satin, K33 Series (7.0 mils wet, 3.0 mils dry per coat).
 - 3. Second Coat: VinylSafe Technology Finish, Duration Exterior Acrylic Satin, K33 Series (7.0 mils wet, 3.0 mils dry per coat).
- B. Existing and New Galvanized Metals and Ferrous Metals, Hi-Solids Polyurethane, 3 Coat:
 - 1. One coat Pro Industrial Pro-Cryl Primer.
 - 2. Intermediate Coat: Pro Industrial Waterbased Alkyd Urethane Semi-Gloss, B53-1150 series.
 - 3. Topcoat: Pro Industrial Waterbased Alkyd Urethane Semi-Gloss, B53-1150 series.

2.04 ACCESSORY MATERIALS

- A. Accessory Materials: Provide primers, sealers, cleaning agents, cleaning cloths, sanding materials, and clean-up materials as required for final completion of painted surfaces.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Do not begin application of paints and finishes until substrates have been properly prepared.
- B. Verify that surfaces are ready to receive work as instructed by the product manufacturer.
- C. Examine surfaces scheduled to be finished prior to commencement of work. Report any condition that may potentially effect proper application.
- D. Test shop-applied primer for compatibility with subsequent cover materials.
- E. Measure moisture content of surfaces using an electronic moisture meter. Do not apply finishes unless moisture content of surfaces are below the following maximums:
 - 1. Fiber Cement Siding: 12 percent.

3.02 PREPARATION

- A. Clean surfaces thoroughly and correct defects prior to application.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
- C. Remove surface appurtenances, including electrical plates, hardware, light fixture trim, escutcheons, and fittings, prior to preparing surfaces for finishing.
- D. Seal surfaces that might cause bleed through or staining of topcoat.
- E. Remove mildew from impervious surfaces by scrubbing with solution of tetra-sodium phosphate and bleach. Rinse with clean water and allow surface to dry.
- F. Previously finished surfaces shall be completely primed after initial surfaces preparation; touch-up priming shall not be acceptable.
- G. Fiber Cement Siding: Remove dirt, dust and other foreign matter with a stiff fiber brush. Do not coat surfaces if moisture content or alkalinity of surfaces to be coated exceeds that permitted in manufacturer's written instructions.
- H. Existing Galvanized and Ferrous Metal (Steel at edge of Concrete Cast-in-Place slabs):

1. Power Tool Cleaning per SSPC-SP 3 to remove all loose mill scale, loose rust, loose paint, and other loose detrimental foreign matter by power wire brushing, power sanding, power grinding, power tool chipping, and power tool descaling.

3.03 APPLICATION

- A. Remove unfinished louvers, grilles, covers, and access panels on mechanical and electrical components and paint separately.
- B. Apply products in accordance with manufacturer's written instructions.
- C. Do not apply finishes to surfaces that are not dry. Allow applied coats to dry before next coat is applied.
- D. Apply each coat to uniform appearance.
 1. There shall be no visible evidence of runs, sags, curtains or other evidence of poor application.
 2. Brush Application: Brush out each coat uniformly to eliminate laps, skips and excess brush marks.
 3. Roller Application: Avoid signs of lapping with excess paint lines from edge of roller. Areas cut-in with a brush shall have texture, color and hiding blended to assure good appearance.
 4. Spray Application: Apply before the installation of fixtures, hardware, flooring and other finish items unless thoroughly protected. Provide uniform finish with no evidence of poor or improper application.
 5. Application by glove shall not be permitted.
- E. Dark Colors and Deep Clear Colors: Regardless of number of coats specified, apply additional coats until complete hide is achieved.
- F. Vacuum clean surfaces of loose particles. Use tack cloth to remove dust and particles just prior to applying next coat.
- G. Reinstall electrical cover plates, hardware, light fixture trim, escutcheons, and fittings removed prior to finishing.

3.04 FIELD QUALITY CONTROL

- A. See Section 01 4000 - Quality Requirements, for general requirements for field inspection.
- B. Westmoreland County Housing Authority will provide field inspection.

3.05 CLEANING

- A. Collect waste material that could constitute a fire hazard, place in closed metal containers, and remove daily from site.

3.06 PROTECTION

- A. Protect finishes until completion of project.
- B. Touch-up damaged finishes after Substantial Completion.

END OF SECTION

**SECTION 09 9123
INTERIOR PAINTING**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Surface preparation.
- B. Field application of paints.
- C. Scope: Finish interior surfaces exposed to view, unless fully factory-finished and unless otherwise indicated.
 - 1. Paint and coat surfaces behind movable equipment and furniture to be same as similar exposed surfaces. Paint surfaces behind permanently fixed equipment or furniture with prime coat only, before final installation of equipment.
 - 2. Prime surfaces to receive wall coverings.
 - 3. Mechanical and Electrical:
 - a. In finished areas, paint insulated and exposed pipes, conduit, boxes, insulated and exposed ducts, hangers, brackets, collars and supports, mechanical equipment, and electrical equipment, unless otherwise indicated.
 - b. In finished areas, paint shop-primed items.
 - c. Paint interior surfaces of air ducts and convector and baseboard heating cabinets that are visible through grilles and louvers with one coat of flat black paint to visible surfaces.
 - d. Paint dampers exposed behind louvers, grilles, to match face panels.
- D. Do Not Paint or Finish the Following Items:
 - 1. Items factory-finished unless otherwise indicated; materials and products having factory-applied primers are not considered factory finished.
 - 2. Items indicated to receive other finishes.
 - 3. Items indicated to remain unfinished.
 - 4. Fire rating labels, equipment serial number and capacity labels, bar code labels, and operating parts of equipment.
 - 5. Non-metallic roofing and flashing.
 - 6. Stainless steel, anodized aluminum, bronze, terne-coated stainless steel, and lead items.
 - 7. Marble, granite, slate, and other natural stones.
 - 8. Floors, unless specifically indicated.
 - 9. Ceramic and other tiles.
 - 10. Glass.
 - 11. Acoustical materials, unless specifically indicated.
 - 12. Concealed pipes, ducts, and conduits.

1.02 RELATED REQUIREMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division I Specification Sections, apply to this Section.
- B. Section 01 6116 - Volatile Organic Compound (VOC) Content Restrictions.

1.03 DEFINITIONS

- A. Comply with ASTM D16 for interpretation of terms used in this section.

1.04 REFERENCE STANDARDS

- A. ASTM D16 - Standard Terminology for Paint, Related Coatings, Materials, and Applications; 2024.
- B. SSPC-SP 1 - Solvent Cleaning; 2015, with Editorial Revision (2016).
- C. SSPC-SP 2 - Hand Tool Cleaning; 2018.
- D. SSPC-SP 3 - Power Tool Cleaning; 2018.

1.05 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide complete list of products to be used, with the following information for each:
 - 1. Manufacturer's name, product name and/or catalog number, and general product category (e.g., "alkyd enamel").
 - 2. MPI product number (e.g., MPI #47).
 - 3. Cross-reference to specified paint system(s) product is to be used in; include description of each system.
 - 4. Manufacturer's installation instructions.
- C. Samples: Submit three paper "draw down" samples, 8-1/2 by 11 inches in size, illustrating range of colors available for each finishing product specified.
 - 1. Where sheen is specified, submit samples in only that sheen.
 - 2. Paint color submittals will not be considered until color submittals for major materials not to be painted, such as tub/shower surrounds, have been approved.
- D. Certification: By manufacturer that paints and finishes comply with VOC limits specified.
- E. Manufacturer's Instructions: Indicate special surface preparation procedures.

1.06 MOCK-UP

- A. See Section 01 4000 - Quality Requirements, for general requirements for mock-up.
- B. Provide three (3) panels illustrating sand finish texture, 2 feet long by 2 feet wide, illustrating paint color, texture, and finish.
- C. Mock-up may not remain as part of the work.

1.07 DELIVERY, STORAGE, AND HANDLING

- A. Deliver products to site in sealed and labeled containers; inspect to verify acceptability.
- B. Container Label: Include manufacturer's name, type of paint, brand name, lot number, brand code, coverage, surface preparation, drying time, cleanup requirements, color designation, and instructions for mixing and reducing.
- C. Paint Materials: Store at minimum ambient temperature of 45 degrees F and a maximum of 90 degrees F, in ventilated area, and as required by manufacturer's instructions.
 - 1. Assign one area for storing painting supplies and equipment.
 - 2. Protect floors and other surfaces of this area from damage.
 - 3. Store materials not in actual use in tightly covered containers in this area.
 - 4. Prevent fire, explosions, and other damage caused by materials and equipment.

1.08 FIELD CONDITIONS

- A. Do not apply materials when surface and ambient temperatures are outside the temperature ranges required by the paint product manufacturer.
- B. Follow manufacturer's recommended procedures for producing best results, including testing of substrates, moisture in substrates, and humidity and temperature limitations.
- C. Do not apply materials when relative humidity exceeds 85 percent, at temperatures less than 5 degrees F above the dew point, or to damp or wet surfaces.
- D. Minimum Application Temperatures for Paints: 50 degrees F for interiors unless required otherwise by manufacturer's instructions.
- E. Provide lighting level of 50 ft candles measured mid-height at substrate surface.
 - 1. Where existing lighting cannot achieve indicated lighting level, General Contractor shall provide temporary lighting explicitly for painting.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Provide paints and finishes from the same manufacturer.
 - 1. If a single manufacturer cannot provide specified products; minor exceptions will be permitted provided approval by Canzian/Johnston & Associates, LLC is obtained using the specified procedures for substitutions.
- B. Paints:
 - 1. Base Manufacturer: The Sherwin-Williams Company: www.sherwin-williams.com.
 - 2. Pittsburgh Paints: www.ppgpaints.com/#sle.
- C. Primer Sealers: Same manufacturer as top coats.

2.02 PAINTS AND FINISHES - GENERAL

- A. Paints and Finishes: Ready-mixed, unless intended to be a field-catalyzed paint.
 - 1. Provide paints and finishes of a soft paste consistency, capable of being readily and uniformly dispersed to a homogeneous coating, with good flow and brushing properties, and capable of drying or curing free of streaks or sags.
 - 2. Provide materials that are compatible with one another and the substrates indicated under conditions of service and application, as demonstrated by manufacturer based on testing and field experience.
 - 3. For opaque finishes, tint each coat including primer coat and intermediate coats, one-half shade lighter than succeeding coat, with final finish coat as base color.
 - 4. Supply each paint material in quantity required to complete entire project's work from a single production run.
 - 5. Do not reduce, thin, or dilute paint or finishes or add materials unless such procedure is specifically described in manufacturer's product instructions.
- B. Volatile Organic Compound (VOC) Content: Comply with Section 01 6116.
- C. Flammability: Comply with applicable code for surface burning characteristics.
- D. Sheens: Provide the sheens specified; where sheen is not specified, sheen will be selected later by Canzian/Johnston & Associates, LLC from the manufacturer's full line.
- E. Colors: To be selected from manufacturer's full range of available colors.
 - 1. Selection to be made by Canzian/Johnston & Associates, LLC after award of contract.
 - 2. Allow for minimum of three colors for each system, unless otherwise indicated, without additional cost to Westmoreland County Housing Authority.
 - 3. Extend colors to surface edges; colors may change at any edge as directed by Canzian/Johnston & Associates, LLC.
 - 4. In finished areas, finish pipes, ducts, conduit, and equipment the same color as the wall/ceiling under which they are mounted.

2.03 PAINT SYSTEMS - INTERIOR

- A. Ferrous Metals, Primed, Acrylic, 2 Coat:
 - 1. Touch-up with S-W ProCryl Universal Primer, B66-310 Series (2-4 mils dry).
 - 2. Gloss: Two coats; S-W Pro Industrial High Performance Acrylic B66-600 Series (2.5 - 4.0 mils dry per coat).
- B. Gypsum Board/Plaster, Latex, 3 Coat:
 - 1. One coat primer of S-W ProMar 200 Zero VOC Latex Primer, B28W2600 (4 mils wet, 1.5 mils dry).
 - 2. Semi-gloss: Two coats; S-W ProMar 200 Zero VOC Latex Semi-Gloss, B31-2651 series (4 mils wet, 1.7 mils dry per coat).

2.04 ACCESSORY MATERIALS

- A. Accessory Materials: Provide all primers, sealers, cleaning agents, cleaning cloths, sanding materials, and clean-up materials required for final completion of painted surfaces.

- B. Patching Material: Latex filler.
- C. Fastener Head Cover Material: Latex filler.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Do not begin application of paints and finishes until substrates have been adequately prepared.
- B. Verify that surfaces are ready to receive work as instructed by the product manufacturer.
- C. Examine surfaces scheduled to be finished prior to commencement of work. Report any condition that may potentially affect proper application.
- D. Test shop-applied primer for compatibility with subsequent cover materials.
 - 1. Review other Sections of these Specifications in which prime paints are to be provided, to ensure compatibility of total coatings system for various substrates.
 - 2. Upon request from other trades, furnish information on characteristics of finish materials proposed for use, to ensure compatible prime coats are used.
 - 3. Provide barrier coats over incompatible primers, or remove and reprime as required.
- E. Field verify primer for compatibility with existing finishes.
- F. Measure moisture content of surfaces using an electronic moisture meter. Do not apply finishes unless moisture content of surfaces is below the following maximums:
 - 1. Gypsum Wallboard: 12 percent.

3.02 PREPARATION

- A. Clean surfaces thoroughly and correct defects prior to application.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
- C. Remove or repair existing paints or finishes that exhibit surface defects.
- D. Remove or mask surface appurtenances, including electrical plates, hardware, light fixture trim, escutcheons, and fittings, prior to preparing surfaces or finishing.
- E. Seal surfaces that might cause bleed through or staining of topcoat.
- F. Remove mildew from impervious surfaces by scrubbing with solution of tetra-sodium phosphate and bleach. Rinse with clean water and allow surface to dry.
- G. Gypsum Board: Fill minor defects with filler compound.
- H. Ferrous Metal:
 - 1. Corroded Steel and Iron Surfaces to be Painted: Prepare using at least SSPC-SP 2 (hand tool cleaning) or SSPC-SP 3 (power tool cleaning) followed by SSPC-SP 1 (solvent cleaning).
 - 2. Uncorroded Uncoated Steel and Iron Surfaces to be Painted: Remove grease, mill scale, weld splatter, dirt, and rust. Where heavy coatings of scale are evident, remove by hand wire brushing or sandblasting; clean by washing with solvent. Apply a treatment of phosphoric acid solution, ensuring weld joints, bolts, and nuts are similarly cleaned. Prime paint entire surface; spot prime after repairs.
 - 3. Shop-Primed Surfaces: Sand and scrape to remove loose primer and rust. Feather edges to make touch-up patches inconspicuous. Clean surfaces with solvent. Prime bare steel surfaces.
 - 4. Remove rust, loose mill scale, and other foreign substances using methods recommended in writing by paint manufacturer and hand tool cleaning/power tool cleaning. Protect from corrosion until coated.

3.03 APPLICATION

- A. Remove unfinished louvers, grilles, covers, and access panels on mechanical and electrical components and paint separately.

- B. Apply products in accordance with manufacturer's written instructions.
- C. Where adjacent sealant is to be painted, do not apply finish coats until sealant is applied.
- D. Do not apply finishes to surfaces that are not dry. Allow applied coats to dry before next coat is applied.
- E. Apply each coat to uniform appearance in thicknesses specified by manufacturer.
 - 1. At textured finish, ensure additive is well mixed and accurately measured in order to ensure adjacent wall faces have matching textures.
- F. There shall be no visible evidence of runs, sags, curtains or other evidence of poor application.
- G. Brush Application: Brush out each coat uniformly to eliminate laps, skips and excess brush marks.
- H. Roller Application: Avoid signs of lapping with excess paint lines from edge of roller. Areas cut-in with a brush shall have texture, color and hiding blended to assure good appearance.
- I. Spray Application: Apply before the installation of fixtures, hardware, flooring and other finish items unless thoroughly protected. Provide uniform finish with no evidence of poor or improper application.
- J. Application by glove shall not be permitted.
- K. Dark Colors and Deep Clear Colors: Regardless of number of coats specified, apply as many coats as necessary for complete hide.
- L. Vacuum clean surfaces of loose particles. Use tack cloth to remove dust and particles just prior to applying next coat.
- M. Reinstall electrical cover plates, hardware, light fixture trim, escutcheons, and fittings removed prior to finishing.

3.04 CLEANING

- A. Collect waste material that could constitute a fire hazard, place in closed metal containers, and remove daily from site.

3.05 PROTECTION

- A. Protect finishes until completion of project.
- B. Touch-up damaged finishes after Substantial Completion.
- C. Spot painting to correct soiled or damaged paint surfaces will be allowed only when touch-up spot is blended into surrounding finish and is invisible to normal viewing. Otherwise, re-coat entire section at corners or visible stopping point.
- D. Remove paint or coating splatter and spills from floors or adjacent colors, material, glass, hardware, and other finished surfaces.

3.06 SCHEDULE - PAINT SYSTEMS

- A. Gypsum Board: Finish surfaces exposed to view.
- B. Steel Doors and Frames: Finish surfaces exposed to view.
- C. Steel Fabrications: Finish surfaces exposed to view.
- D. Shop-Primed Metal Items: Finish surfaces exposed to view.

END OF SECTION

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**SECTION 09 9723
CONCRETE AND MASONRY COATINGS**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Water-based, high-build, 100 percent acrylic, waterproof coating.

1.02 RELATED REQUIREMENTS

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

1.03 REFERENCE STANDARDS

- A. ASTM B117 - Standard Practice for Operating Salt Spray (Fog) Apparatus; 2019.
- B. ASTM D968 - Standard Test Methods for Abrasion Resistance of Organic Coatings by Falling Abrasive; 2005 (Reapproved 2010).
- C. ASTM D1653 - Standard Test Methods for Water Vapor Transmission of Organic Coating Films; 2013 (Reapproved 2021).
- D. ASTM D2794 - Standard Test Method for Resistance of Organic Coatings to the Effects of Rapid Deformation (Impact); 1993 (Reapproved 2024).
- E. ASTM D3273 - Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber; 2012.
- F. ASTM D4214 - Standard Test Methods for Evaluating the Degree of Chalking of Exterior Paint Films; 2023.
- G. ASTM D6904 - Standard Practice for Resistance to Wind-Driven Rain for Exterior Coatings Applied on Masonry; 2003 (Reapproved 2022).
- H. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2024.
- I. ISO 9000 - ISO Standards Compendium: ISO 9000 - Quality management; 2005.

1.04 ADMINISTRATIVE REQUIREMENTS

- A. Preinstallation Meeting: Conduct a preinstallation meeting at least one week prior to the start of the work of this section; require attendance by all affected installers and representative of material manufacturer.

1.05 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Product Data: Submit manufacturer's technical data sheets..
- C. Installer's Qualification Statement.

1.06 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing the Products specified in this section with minimum ten (10) years documented experience.
 - 1. Manufacturers shall comply with the ISO 9000 quality standard in the development, manufacturing, and sale of their products.
- B. Installer Qualifications: Company specializing in performing the work of this section and with at least five (5) years of documented experience.
 - 1. Contractor shall maintain qualified personnel who have received product training by a manufacturer's representative.
 - 2. The contractor shall submit documentation attesting to training having been performed by a manufacturer's representative.

1.07 MOCK-UP

- A. Provide mock-up, 8 feet long by the width of the egress balcony, with system applied to representative substrate, illustrating coating, color, and surface sheen.
- B. Where existing substrate requires repairs, all repairs shall be completed prior to mock-up being provided.
- C. One mock-up shall be provided at each building site.
- D. Locate where directed by Westmoreland County Housing Authority.
- E. Accepted mock-up may remain as part of the Work. Obtain Westmoreland County Housing Authority acceptance in writing prior to carrying out any further work of this Section.
 - 1. Mock-ups that are not accepted shall be removed at no additional cost to Westmoreland County Housing Authority; this work shall include any repairs necessary due to the removal of the rejected mock-up(s).

1.08 DELIVERY, STORAGE, AND HANDLING

- A. Comply with manufacturers' instructions for storage, shelf life limitations, and handling of products.
- B. All materials must be delivered in original, unopened containers with the manufacturer's name, labels, product identification, and batch numbers. Damaged material must be removed from the site immediately.
- C. Store all materials off the ground and protect from rain, freezing or excessive heat until ready for use.
- D. Condition the specified product as recommended by the manufacturer.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Concrete and Masonry Coatings:
 - 1. Basis of Design: Design is based upon the use of Sika Thorocoat - 400 as manufactured by Sika Corporation (www.usa.sika.com). The terminology used may include reference to proprietary products of that company.
 - a. Construe such reference as establishing only the quality of workmanship and materials to be provided under this Section, and not as limiting competition.
 - b. Substitutions: See Section 01 6000 - Product Requirements.

2.02 MATERIALS

- A. Coatings - General: Provide complete systems formulated and recommended by manufacturer for the applications indicated, in the thicknesses indicated.
- B. Water-based, high-build, 100 percent acrylic, waterproof coating.
- C. Performance Requirements (based on smooth texture)
 - 1. Resistance to Wind-Driven Rain, Federal Specification ASTM D6904: Meets requirement. No water penetration.
 - 2. Accelerated Weathering, ASTM G152, 5,000 hours: Passes.
 - 3. Visual Color Change, ASTM D1729, 5,000 hours: Passes.
 - 4. Chalking, ASTM D4214, 5,000 hours: Passes.
 - 5. Freeze/Thaw Resistance, DOT Methods A and B, 50 cycles: Passes.
 - 6. Water-Vapor Permeance, ASTM D1653: 13 perms.
 - 7. Moisture Resistance, Federal Specification TT-C-555B: Meets requirement. No blistering, loss of adhesion, or discoloration.
 - 8. Salt Spray (Fog) Resistance, ASTM B117117, 300 hours: Passes.
 - 9. Flexibility, ASTM D1737, 1-inch mandrel: No cracking.
 - 10. Dirt Pick-Up, ASTM D3719, after 6 months exposure: 92 percent. Passes.
 - 11. Sand Abrasion Resistance, ASTM D968, Method A, at 3,000 L: Passes.

12. Impact Resistance, ASTM D2794, at 30 in-lbs: Passes.
13. Fungus Resistance, ASTM D3273: No growth. Meets requirement.
14. Mildew Resistance, Federal Specification TT-P-29 (Federal Standard 141, Method 6152 and 6271.1):
 - a. Aspergillus Oryzae, 7 days: No growth.
 - b. Aspergillus Niger, 21 days: No growth.
15. Surface Burning Characteristics, ASTM E84:
 - a. Flame Spread: 1.
 - b. Smoke: 4.
 - c. Fuel Contribution: 7
- D. Wet Film Thickness (WFT):
 1. Smooth: 16 to 22 mils.
 2. Fine: 16 to 22 mils.
 3. Coarse: 16 to 22 mils.
- E. Dry Film Thickness (DFT):
 1. Smooth: 6 to 8 mils.
 2. Fine: 8 to 11 mils.
 3. Coarse: 8 to 11 mils.
- F. Color: To be selected by Canzian/Johnston & Associates, LLC from manufacturer's full range.
- G. Texture: Fine.
- H. Primer: As recommended by manufacturer.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify existing conditions before starting work.
- B. Verify that substrate surfaces are ready to receive work as instructed by the coating manufacturer. Obtain and follow manufacturer's instructions for examination and testing of substrates.
- C. Notify Canzian/Johnston & Associates, LLC in writing of conditions detrimental to proper and timely completion of work. Do not proceed with erection until unsatisfactory conditions have been corrected.
 1. Starting work constitutes acceptance of the existing conditions and the Contractor shall be responsible for any delays or changes required to existing conditions at the Contractor's expense.

3.02 PREPARATION

- A. Clean surfaces of loose foreign matter.
- B. Remove substances that would bleed through finished coatings.
- C. Remove finish hardware, fixture covers, and accessories and salvage.
 1. Note: All items shall be re-installed following coating application.
- D. Protect adjacent surfaces and materials not receiving coating from spatter and overspray; mask if necessary to provide adequate protection. Repair damage.
- E. Prepare surfaces in accordance with manufacturer's instructions.

3.03 PRIMING

- A. Apply primer to all surfaces, unless specifically not required by coating manufacturer. Apply in accordance with coating manufacturer's instructions.

3.04 COATING APPLICATION

- A. Apply coatings in accordance with manufacturer's instructions, to thicknesses specified.

- B. Apply in uniform thickness coats, without runs, drips, pinholes, brush marks, or variations in color, texture, or finish. Finish edges, crevices, corners, and other changes in dimension with full coating thickness.
 - 1. Apply coating as a two-coat system.
 - 2. Maintain proper uniform wet-film thickness during application to ensure performance characteristics desired.
 - 3. Apply coating using consistent application techniques to achieve uniform color and texture.

3.05 CLEANING

- A. Collect waste material that could constitute a fire hazard, place in closed metal containers, and remove daily from site.
- B. Clean surfaces immediately of overspray, splatter, and excess material.
- C. After coating has cured, clean and re-install finish hardware, fixtures, and fittings previously removed.

3.06 PROTECTION

- A. Protect finished work from damage.

END OF SECTION

SECTION 260519
LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Single conductor building wire.
- B. Metal-clad cable.
- C. Wiring connectors.
- D. Electrical tape.
- E. Wire pulling lubricant.
- F. Cable ties.
- G. Firestop sleeves.

1.02 RELATED REQUIREMENTS

- A. Section 078400 - Firestopping.

1.03 REFERENCE STANDARDS

- A. ASTM B3 - Standard Specification for Soft or Annealed Copper Wire; 2013 (Reapproved 2024).
- B. ASTM B8 - Standard Specification for Concentric-Lay-Stranded Copper Conductors, Hard, Medium-Hard, or Soft; 2023.
- C. ASTM B33 - Standard Specification for Tin-Coated Soft or Annealed Copper Wire for Electrical Purposes; 2010, with Editorial Revision (2020).
- D. ASTM B787/B787M - Standard Specification for 19 Wire Combination Unilay-Stranded Copper Conductors for Subsequent Insulation; 2004 (Reapproved 2020).
- E. ASTM D3005 - Standard Specification for Low-Temperature Resistant Vinyl Chloride Plastic Pressure-Sensitive Electrical Insulating Tape; 2024.
- F. NECA 1 - Standard for Good Workmanship in Electrical Construction; 2023.
- G. NECA 120 - Standard for Installing Armored Cable (AC) and Type Metal-Clad (MC) Cable; 2018.
- H. NEMA WC 70 - Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy; 2021.
- I. NETA ATS - Standard for Acceptance Testing Specifications for Electrical Power Equipment And Systems; 2025.
- J. NFPA 70 - National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
- K. UL 44 - Thermoset-Insulated Wires and Cables; Current Edition, Including All Revisions.
- L. UL 83 - Thermoplastic-Insulated Wires and Cables; Current Edition, Including All Revisions.
- M. UL 267 - Outline of Investigation for Wire-Pulling Compounds; Current Edition, Including All Revisions.
- N. UL 486A-486B - Wire Connectors; Current Edition, Including All Revisions.
- O. UL 486C - Splicing Wire Connectors; Current Edition, Including All Revisions.
- P. UL 510 - Polyvinyl Chloride, Polyethylene, and Rubber Insulating Tape; Current Edition, Including All Revisions.
- Q. UL 1569 - Metal-Clad Cables; Current Edition, Including All Revisions.

1.04 ADMINISTRATIVE REQUIREMENTS

- A. Coordination:

1. Coordinate sizes of raceways, boxes, and equipment enclosures installed under other sections with the actual conductors to be installed, including adjustments for conductor sizes increased for voltage drop.
2. Coordinate with electrical equipment installed under other sections to provide terminations suitable for use with the conductors to be installed.
3. Notify Architect of any conflicts with or deviations from Contract Documents. Obtain direction before proceeding with work.

1.05 SUBMITTALS

- A. See Section 013000 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide manufacturer's standard catalog pages and data sheets for conductors and cables, including detailed information on materials, construction, ratings, listings, and available sizes, configurations, and stranding.
- C. Wire Pulling Lubricant: Certification of compatibility with conductors/cables where used with the following insulation/jacket types:
- D. Field Quality Control Test Reports.

1.06 QUALITY ASSURANCE

- A. Comply with requirements of NFPA 70.

1.07 DELIVERY, STORAGE, AND HANDLING

- A. Receive, inspect, handle, and store conductors and cables in accordance with manufacturer's instructions.

1.08 FIELD CONDITIONS

- A. Do not install or otherwise handle thermoplastic-insulated conductors at temperatures lower than 14 degrees F (-10 degrees C), unless otherwise permitted by manufacturer's instructions. When installation below this temperature is unavoidable, notify Architect and obtain direction before proceeding with work.

PART 2 PRODUCTS

2.01 CONDUCTOR AND CABLE APPLICATIONS

- A. Do not use conductors and cables for applications other than as permitted by NFPA 70 and product listing.
- B. Provide single conductor building wire installed in suitable raceway unless otherwise indicated, permitted, or required.
- C. Nonmetallic-sheathed cable is not permitted.

2.02 CONDUCTOR AND CABLE GENERAL REQUIREMENTS

- A. Provide products that comply with requirements of NFPA 70.
- B. Provide products listed, classified, and labeled as suitable for the purpose intended.
- C. Unless specifically indicated to be excluded, provide all required conduit, boxes, wiring, connectors, etc. as required for a complete operating system.
- D. Comply with NEMA WC 70.
- E. Thermoplastic-Insulated Conductors and Cables: Listed and labeled as complying with UL 83.
- F. Thermoset-Insulated Conductors and Cables: Listed and labeled as complying with UL 44.
- G. Conductor Material:
 1. Provide copper conductors only. Aluminum conductors are not acceptable for this project. Conductor sizes indicated are based on copper.
 2. Copper Conductors: Soft drawn annealed, 98 percent conductivity, uncoated copper conductors complying with ASTM B3, ASTM B8, or ASTM B787/B787M unless otherwise indicated.
 3. Tinned Copper Conductors: Comply with ASTM B33.

- H. Conductor Color Coding:
1. Color code conductors as indicated unless otherwise required by the authority having jurisdiction. Maintain consistent color coding throughout project.
 2. Color Coding Method: Integrally colored insulation.
 3. Color Code:
 - a. 208Y/120 V, 3 Phase, 4 Wire System:
 - 1) Phase A: Black.
 - 2) Phase B: Red.
 - 3) Phase C: Blue.
 - 4) Neutral/Grounded: White.
 - b. 240/120 V, 1 Phase, 3 Wire System:
 - 1) Phase A: Black.
 - 2) Phase B: Red.
 - 3) Neutral/Grounded: White.
 - c. Equipment Ground, All Systems: Green.

2.03 SINGLE CONDUCTOR BUILDING WIRE

- A. Manufacturers:
1. Copper Building Wire:
 - a. General Cable Technologies Corporation: www.generalcable.com/#sle.
 - b. Service Wire Co: www.servicewire.com/#sle.
 - c. Southwire Company: www.southwire.com/#sle.
- B. Description: Single conductor insulated wire.
- C. Conductor Stranding:
1. Feeders and Branch Circuits:
 - a. Size 10 AWG and Smaller: Solid.
 - b. Size 8 AWG and Larger: Stranded.
- D. Insulation Voltage Rating: 600 V.
- E. Insulation:
1. Copper Building Wire: Type THHN/THWN or THHN/THWN-2, except as indicated below.

2.04 METAL-CLAD CABLE

- A. Manufacturers:
1. AFC Cable Systems Inc: www.afcweb.com/#sle.
 2. Encore Wire Corporation: www.encorewire.com/#sle.
 3. Service Wire Co: www.servicewire.com/#sle.
 4. Southwire Company: www.southwire.com/#sle.
- B. Description: NFPA 70, Type MC cable listed and labeled as complying with UL 1569, and listed for use in classified firestop systems to be used.
- C. Conductor Stranding:
1. Size 10 AWG and Smaller: Solid.
 2. Size 8 AWG and Larger: Stranded.
- D. Insulation Voltage Rating: 600 V.
- E. Insulation: Type THHN, THHN/THWN, or THHN/THWN-2.
- F. Grounding: Full-size integral equipment grounding conductor.
- G. Armor: Steel, interlocked tape.

2.05 WIRING CONNECTORS

- A. Description: Wiring connectors appropriate for the application, suitable for use with the conductors to be connected, and listed as complying with UL 486A-486B or UL 486C as applicable.

- B. Wiring Connectors for Splices and Taps:
 - 1. Copper Conductors Size 6 AWG and Larger: Use mechanical connectors or compression connectors.
- C. Mechanical Connectors: Provide bolted type or set-screw type.
- D. Compression Connectors: Provide circumferential type or hex type crimp configuration.

2.06 ACCESSORIES

- A. Electrical Tape:
 - 1. Vinyl Insulating Electrical Tape: Complying with ASTM D3005 and listed as complying with UL 510; minimum thickness of 7 mil (0.18 mm); resistant to abrasion, corrosion, and sunlight; conformable for application down to 0 degrees F (-18 degrees C) and suitable for continuous temperature environment up to 221 degrees F (105 degrees C).
- B. Wire Pulling Lubricant:
 - 1. Listed and labeled as complying with UL 267.
 - 2. Suitable for use with conductors/cables and associated insulation/jackets to be installed.
 - 3. Suitable for use at installation temperature.
- C. Cable Ties: Material and tensile strength rating suitable for application.
- D. Firestop Sleeves: Listed; provide as required to preserve fire resistance rating of building elements.
- E. Fire-Protective Coating for Electrical Conductors and Cables: Field-applied, intumescent or ablative coating designed to prevent ignition and propagation of fire along thermoplastic-insulated conductors and cables.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that interior of building has been protected from weather.
- B. Verify that work likely to damage wire and cable has been completed.
- C. Verify that raceways, boxes, and equipment enclosures are installed and are properly sized to accommodate conductors and cables in accordance with NFPA 70.
- D. Verify that field measurements are as indicated.
- E. Verify that conditions are satisfactory for installation prior to starting work.

3.02 PREPARATION

- A. Clean raceways thoroughly to remove foreign materials before installing conductors and cables.

3.03 INSTALLATION

- A. Circuiting Requirements:
 - 1. Unless dimensioned, circuit routing indicated is diagrammatic.
 - 2. When circuit destination is indicated without specific routing, determine exact routing required.
 - 3. Common Neutrals: Unless otherwise indicated, sharing of neutral/grounded conductors among up to three single phase branch circuits of different phases installed in the same raceway is not permitted. Provide dedicated neutral/grounded conductor for each individual branch circuit.
- B. Install products in accordance with manufacturer's instructions.
- C. Perform work in accordance with NECA 1 (general workmanship).
- D. Install metal-clad cable (Type MC) in accordance with NECA 120.
- E. Installation in Raceway:
 - 1. Tape ends of conductors and cables to prevent infiltration of moisture and other contaminants.

2. Pull all conductors and cables together into raceway at same time.
 3. Do not damage conductors and cables or exceed manufacturer's recommended maximum pulling tension and sidewall pressure.
 4. Use suitable wire pulling lubricant where necessary, except when lubricant is not recommended by the manufacturer.
- F. Paralleled Conductors: Install conductors of the same length and terminate in the same manner.
- G. Secure and support conductors and cables in accordance with NFPA 70 using suitable supports and methods approved by the authority having jurisdiction. Provide independent support from building structure. Do not provide support from raceways, piping, ductwork, or other systems.
- H. Terminate cables using suitable fittings.
1. Metal-Clad Cable (Type MC):
 - a. Use listed fittings.
 - b. Cut cable armor only using specialized tools to prevent damaging conductors or insulation. Do not use hacksaw or wire cutters to cut armor.
- I. Install conductors with a minimum of 12 inches (300 mm) of slack at each outlet.
- J. Neatly train and bundle conductors inside boxes, wireways, panelboards and other equipment enclosures.
- K. Group or otherwise identify neutral/grounded conductors with associated ungrounded conductors inside enclosures in accordance with NFPA 70.
- L. Make wiring connections using specified wiring connectors.
1. Make splices and taps only in accessible boxes. Do not pull splices into raceways or make splices in conduit bodies or wiring gutters.
 2. Remove appropriate amount of conductor insulation for making connections without cutting, nicking or damaging conductors.
 3. Do not remove conductor strands to facilitate insertion into connector.
 4. Clean contact surfaces on conductors and connectors to suitable remove corrosion, oxides, and other contaminates. Do not use wire brush on plated connector surfaces.
 5. Mechanical Connectors: Secure connections according to manufacturer's recommended torque settings.
 6. Compression Connectors: Secure connections using manufacturer's recommended tools and dies.
- M. Insulate splices and taps that are made with uninsulated connectors using methods suitable for the application, with insulation and mechanical strength at least equivalent to unspliced conductors.
- N. Insulate ends of spare conductors using vinyl insulating electrical tape.
- O. Install firestopping to preserve fire resistance rating of partitions and other elements, using materials and methods specified in Section 078400.
- P. Unless specifically indicated to be excluded, provide final connections to all equipment and devices, including those furnished by others, as required for a complete operating system.

3.04 FIELD QUALITY CONTROL

- A. Inspect and test in accordance with NETA ATS, except Section 4.
- B. Perform inspections and tests listed in NETA ATS, Section 7.3.2. The insulation resistance test is required for all conductors. The resistance test for parallel conductors listed as optional is not required.
- C. Correct deficiencies and replace damaged or defective conductors and cables.

END OF SECTION

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SECTION 260526
GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Grounding and bonding requirements.
- B. Conductors for grounding and bonding.
- C. Connectors for grounding and bonding.

1.02 RELATED REQUIREMENTS

- A. Section 260519 - Low-Voltage Electrical Power Conductors and Cables: Additional requirements for conductors for grounding and bonding, including conductor color coding.
- B. Section 260553 - Identification for Electrical Systems: Identification products and requirements.

1.03 REFERENCE STANDARDS

- A. NECA 1 - Standard for Good Workmanship in Electrical Construction; 2023.
- B. NETA ATS - Standard for Acceptance Testing Specifications for Electrical Power Equipment And Systems; 2025.
- C. NFPA 70 - National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
- D. UL 467 - Grounding and Bonding Equipment; Current Edition, Including All Revisions.

1.04 SUBMITTALS

- A. See Section 013000 - Administrative Requirements for submittals procedures.
- B. Product Data: Provide manufacturer's standard catalog pages and data sheets for grounding and bonding system components.

1.05 QUALITY ASSURANCE

- A. Comply with requirements of NFPA 70.

PART 2 PRODUCTS

2.01 GROUNDING AND BONDING REQUIREMENTS

- A. Do not use products for applications other than as permitted by NFPA 70 and product listing.
- B. Unless specifically indicated to be excluded, provide all required components, conductors, connectors, conduit, boxes, fittings, supports, accessories, etc. as necessary for a complete grounding and bonding system.
- C. Where conductor size is not indicated, size to comply with NFPA 70 but not less than applicable minimum size requirements specified.
- D. Bonding and Equipment Grounding:
 - 1. Provide bonding for equipment grounding conductors, equipment ground busses, metallic equipment enclosures, metallic raceways and boxes, device grounding terminals, and other normally non-current-carrying conductive materials enclosing electrical conductors/equipment or likely to become energized as indicated and in accordance with NFPA 70.
 - 2. Provide insulated equipment grounding conductor in each feeder and branch circuit raceway. Do not use raceways as sole equipment grounding conductor.
 - 3. Where circuit conductor sizes are increased for voltage drop, increase size of equipment grounding conductor proportionally in accordance with NFPA 70.
 - 4. Unless otherwise indicated, connect wiring device grounding terminal to branch circuit equipment grounding conductor and to outlet box with bonding jumper.
 - 5. Terminate branch circuit equipment grounding conductors on solidly bonded equipment ground bus only. Do not terminate on neutral (grounded) or isolated/insulated ground bus.

6. Provide bonding jumper across expansion or expansion/deflection fittings provided to accommodate conduit movement.

2.02 GROUNDING AND BONDING COMPONENTS

- A. General Requirements:
 1. Provide products listed, classified, and labeled as suitable for the purpose intended.
 2. Provide products listed and labeled as complying with UL 467 where applicable.
- B. Conductors for Grounding and Bonding, in Addition to Requirements of Section 260526:
 1. Use insulated copper conductors unless otherwise indicated.
 - a. Exceptions:
 - 1) Use bare copper conductors where installed underground in direct contact with earth.
- C. Connectors for Grounding and Bonding:
 1. Description: Connectors appropriate for the application and suitable for the conductors and items to be connected; listed and labeled as complying with UL 467.
 2. Unless otherwise indicated, use exothermic welded connections for underground, concealed and other inaccessible connections.
 3. Unless otherwise indicated, use mechanical connectors, compression connectors, or exothermic welded connections for accessible connections.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that work likely to damage grounding and bonding system components has been completed.
- B. Verify that field measurements are as indicated.
- C. Verify that conditions are satisfactory for installation prior to starting work.

3.02 INSTALLATION

- A. Install products in accordance with manufacturer's instructions.
- B. Perform work in accordance with NECA 1 (general workmanship).
- C. Make grounding and bonding connections using specified connectors.
 1. Remove appropriate amount of conductor insulation for making connections without cutting, nicking or damaging conductors. Do not remove conductor strands to facilitate insertion into connector.
 2. Remove nonconductive paint, enamel, or similar coating at threads, contact points, and contact surfaces.
 3. Exothermic Welds: Make connections using molds and weld material suitable for the items to be connected in accordance with manufacturer's recommendations.
 4. Mechanical Connectors: Secure connections according to manufacturer's recommended torque settings.
 5. Compression Connectors: Secure connections using manufacturer's recommended tools and dies.
- D. Identify grounding and bonding system components in accordance with Section 260553.

3.03 FIELD QUALITY CONTROL

- A. See Section 014000 - Quality Requirements, for additional requirements.
- B. Inspect and test in accordance with NETA ATS except Section 4.
- C. Perform inspections and tests listed in NETA ATS, Section 7.13.
- D. Perform ground electrode resistance tests under normally dry conditions. Precipitation within the previous 48 hours does not constitute normally dry conditions.

- E. Investigate and correct deficiencies where measured ground resistances do not comply with specified requirements.

END OF SECTION

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SECTION 260529
HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Support and attachment requirements and components for equipment, conduit, cable, boxes, and other electrical work.

1.02 RELATED REQUIREMENTS

- A. Section 265600 - Exterior Lighting: Additional support and attachment requirements for exterior luminaires.

1.03 REFERENCE STANDARDS

- A. ASTM A123/A123M - Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products; 2024.
- B. ASTM A153/A153M - Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware; 2023.
- C. ASTM B633 - Standard Specification for Electrodeposited Coatings of Zinc on Iron and Steel; 2023.
- D. MFMA-4 - Metal Framing Standards Publication; 2004.
- E. NECA 1 - Standard for Good Workmanship in Electrical Construction; 2023.
- F. NFPA 70 - National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.

1.04 SUBMITTALS

- A. See Section 013000 - Administrative Requirements for submittal procedures.
- B. Product Data: Provide manufacturer's standard catalog pages and data sheets for channel/strut framing systems, nonpenetrating rooftop supports, and post-installed concrete/masonry anchors.

PART 2 PRODUCTS

2.01 SUPPORT AND ATTACHMENT COMPONENTS

- A. General Requirements:
 - 1. Comply with the following. Where requirements differ, comply with most stringent.
 - a. NFPA 70.
 - b. Requirements of authorities having jurisdiction.
 - 2. Provide required hangers, supports, anchors, fasteners, fittings, accessories, and hardware as necessary for complete installation of electrical work.
 - 3. Provide products listed, classified, and labeled as suitable for purpose intended, where applicable.
 - 4. Where support and attachment component types and sizes are not indicated, select in accordance with manufacturer's application criteria as required for load to be supported. Include consideration for vibration, equipment operation, and shock loads where applicable.
 - 5. Do not use products for applications other than as permitted by NFPA 70 and product listing.
 - 6. Steel Components: Use corrosion-resistant materials suitable for environment where installed.
 - a. Zinc-Plated Steel: Electroplated in accordance with ASTM B633.
 - b. Galvanized Steel: Hot-dip galvanized after fabrication in accordance with ASTM A123/A123M or ASTM A153/A153M.
- B. Conduit and Cable Supports: Straps and clamps suitable for conduit or cable to be supported.
 - 1. Conduit Straps: One-hole or two-hole type; steel or malleable iron.

2. Conduit Clamps: Bolted type unless otherwise indicated.
- C. Outlet Box Supports: Hangers and brackets suitable for boxes to be supported.
- D. Metal Channel/Strut Framing Systems:
 1. Description: Factory-fabricated, continuous-slot, metal channel/strut and associated fittings, accessories, and hardware required for field assembly of supports.
 2. Comply with MFMA-4.
- E. Hanger Rods: Threaded, zinc-plated steel unless otherwise indicated.
- F. Anchors and Fasteners:
 1. Manufacturers - Mechanical Anchors:
 - a. Dewalt: anchors.dewalt.com/#sle.
 - b. Hilti, Inc: www.hilti.com/#sle.
 - c. ITW Red Head, a division of Illinois Tool Works, Inc: www.itwredhead.com/#sle.
 2. Unless otherwise indicated and where not otherwise restricted, use anchor and fastener types indicated for specified applications.
 3. Concrete: Use preset concrete inserts, expansion anchors, or screw anchors.
 4. Solid or Grout-Filled Masonry: Use expansion anchors or screw anchors.
 5. Steel: Use beam clamps, machine bolts, or welded threaded studs.
 6. Preset Concrete Inserts: Continuous metal channel/strut and spot inserts specifically designed to be cast in concrete ceilings, walls, and floors.
 - a. Manufacturer: Same as manufacturer of metal channel/strut framing system.
 - b. Comply with MFMA-4.
 - c. Channel Material: Use galvanized steel.

PART 3 EXECUTION

3.01 INSTALLATION

- A. Install products in accordance with manufacturer's instructions.
- B. Install hangers and supports in accordance with NECA 1.
- C. Provide independent support from building structure. Do not provide support from piping, ductwork, or other systems.
- D. Unless specifically indicated or approved by Architect, do not provide support from suspended ceiling support system or ceiling grid.
- E. Unless specifically indicated or approved by Architect, do not provide support from roof deck.
- F. Do not penetrate or otherwise notch or cut structural members without approval of Structural Engineer.
- G. Equipment Support and Attachment:
 1. Use metal, fabricated supports or supports assembled from metal channel/strut to support equipment as required.
 2. Use metal channel/strut secured to studs to support equipment surface mounted on hollow stud walls when wall strength is not sufficient to resist pull-out.
 3. Use metal channel/strut to support surface-mounted equipment in wet or damp locations to provide space between equipment and mounting surface.
 4. Securely fasten floor-mounted equipment. Do not install equipment such that it relies on its own weight for support.
- H. Preset Concrete Inserts: Use manufacturer provided closure strips to inhibit concrete seepage during concrete pour.
- I. Secure fasteners in accordance with manufacturer's recommended torque settings.
- J. Remove temporary supports.

3.02 FIELD QUALITY CONTROL

- A. See Section 014000 - Quality Requirements for additional requirements.

- B. Inspect support and attachment components for damage and defects.
- C. Repair cuts and abrasions in galvanized finishes using zinc-rich paint recommended by manufacturer. Replace components that exhibit signs of corrosion.
- D. Correct deficiencies and replace damaged or defective support and attachment components.

END OF SECTION

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SECTION 260533.13
CONDUIT FOR ELECTRICAL SYSTEMS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Galvanized steel intermediate metal conduit (IMC).
- B. Flexible metal conduit (FMC).
- C. Liquidtight flexible metal conduit (LFMC).
- D. Galvanized steel electrical metallic tubing (EMT).

1.02 RELATED REQUIREMENTS

- A. Section 078400 - Firestopping.
- B. Section 260526 - Grounding and Bonding for Electrical Systems.
- C. Section 260529 - Hangers and Supports for Electrical Systems.

1.03 REFERENCE STANDARDS

- A. ANSI C80.3 - American National Standard for Electrical Metallic Tubing -- Steel (EMT-S); 2020.
- B. ANSI C80.6 - American National Standard for Electrical Intermediate Metal Conduit; 2018.
- C. NECA 1 - Standard for Good Workmanship in Electrical Construction; 2023.
- D. NECA 101 - Standard for Installing Steel Conduits (Rigid, IMC, EMT); 2020.
- E. NEMA FB 1 - Fittings, Cast Metal Boxes, and Conduit Bodies for Conduit, Electrical Metallic Tubing, and Cable; 2014.
- F. NFPA 70 - National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
- G. UL 1 - Flexible Metal Conduit; Current Edition, Including All Revisions.
- H. UL 360 - Liquid-Tight Flexible Metal Conduit; Current Edition, Including All Revisions.
- I. UL 514B - Conduit, Tubing, and Cable Fittings; Current Edition, Including All Revisions.
- J. UL 797 - Electrical Metallic Tubing-Steel; Current Edition, Including All Revisions.
- K. UL 1242 - Electrical Intermediate Metal Conduit-Steel; Current Edition, Including All Revisions.
- L. UL 2419 - Outline of Investigation for Electrically Conductive Corrosion Resistant Compounds; Current Edition, Including All Revisions.

1.04 SUBMITTALS

- A. See Section 013000 - Administrative Requirements for submittals procedures.
- B. Product Data: Provide manufacturer's standard catalog pages and data sheets for conduits and fittings.

1.05 QUALITY ASSURANCE

- A. Product Listing Organization Qualifications: Organization recognized by OSHA as Nationally Recognized Testing Laboratory (NRTL) and acceptable to authorities having jurisdiction.

PART 2 PRODUCTS

2.01 CONDUIT APPLICATIONS

- A. Do not use conduit and associated fittings for applications other than as permitted by NFPA 70, manufacturer's instructions, and product listing.
- B. Unless otherwise indicated and where not otherwise restricted, use conduit types indicated for specified applications. Where more than one listed application applies, comply with most restrictive requirements. Where conduit type for particular application is not specified, use galvanized steel rigid metal conduit.

- C. Concealed Within Hollow Stud Walls: Use galvanized steel intermediate metal conduit (IMC).
- D. Concealed Above Accessible Ceilings: Use galvanized steel intermediate metal conduit (IMC) or galvanized steel electrical metallic tubing (EMT).
- E. Interior, Damp or Wet Locations: Use galvanized steel intermediate metal conduit (IMC).
- F. Exposed, Interior, Not Subject to Physical Damage: Use galvanized steel intermediate metal conduit (IMC).
- G. Concealed, Exterior, Not Embedded in Concrete or in Contact With Earth: Use galvanized steel intermediate metal conduit (IMC) or galvanized steel electrical metallic tubing (EMT).
- H. Flexible Connections to Luminaires Above Accessible Ceilings: Use flexible metal conduit (FMC).
 - 1. Maximum Length: 6 feet (1.8 m).
- I. Fished in Existing Walls, Where Necessary: Use flexible metal conduit (FMC).

2.02 CONDUIT - GENERAL REQUIREMENTS

- A. Comply with NFPA 70.
- B. Provide conduit, fittings, supports, and accessories required for complete raceway system.
- C. Provide products listed, classified, and labeled as suitable for purpose intended.
- D. Minimum Conduit Size, Unless Otherwise Indicated:
 - 1. Branch Circuits: 3/4-inch (21 mm) trade size.
- E. Where conduit size is not indicated, size to comply with NFPA 70 but not less than applicable minimum size requirements specified.

2.03 GALVANIZED STEEL INTERMEDIATE METAL CONDUIT (IMC)

- A. Manufacturers:
 - 1. Allied Tube & Conduit, a division of Atkore International: www.alliedeg.com/#sle.
 - 2. Western Tube, a division of Zekelman Industries: www.westerntube.com/#sle.
 - 3. Wheatland Tube, a division of Zekelman Industries: www.wheatland.com/#sle.
- B. Description: NFPA 70, Type IMC galvanized steel intermediate metal conduit complying with ANSI C80.6 and listed and labeled as complying with UL 1242.
- C. Fittings:
 - 1. Nonhazardous Locations: Use fittings complying with NEMA FB 1 and listed and labeled as complying with UL 514B or UL 1242.
 - 2. Material: Use steel or malleable iron.
 - 3. Connectors and Couplings: Use threaded type fittings only. Threadless fittings, including set screw and compression/gland types, are not permitted.

2.04 FLEXIBLE METAL CONDUIT (FMC)

- A. Manufacturers:
 - 1. AFC Cable Systems, a division of Atkore International: www.afcweb.com/#sle.
 - 2. Electri-Flex Company: www.electriflex.com/#sle.
 - 3. International Metal Hose: www.metalhose.com/#sle.
- B. Description: NFPA 70, Type FMC standard-wall steel flexible metal conduit listed and labeled as complying with UL 1, and listed for use in classified firestop systems.
- C. Fittings:
 - 1. Description: Fittings complying with NEMA FB 1 and listed and labeled as complying with UL 514B.
 - 2. Material: Use steel or malleable iron.

2.05 LIQUIDTIGHT FLEXIBLE METAL CONDUIT (LFMC)

- A. Manufacturers:
 - 1. AFC Cable Systems, a division of Atkore International: www.afcweb.com/#sle.

2. Electri-Flex Company: www.electriflex.com/#sle.
3. International Metal Hose: www.metalhose.com/#sle.
- B. Description: NFPA 70, Type LFMC polyvinyl chloride (PVC) jacketed steel flexible metal conduit listed and labeled as complying with UL 360.
- C. Fittings:
 1. Description: Fittings complying with NEMA FB 1 and listed and labeled as complying with UL 514B.
 2. Material: Use steel or malleable iron.

2.06 GALVANIZED STEEL ELECTRICAL METALLIC TUBING (EMT)

- A. Manufacturers:
 1. Allied Tube & Conduit, a division of Atkore International: www.alliedeg.com/#sle.
 2. Western Tube, a division of Zekelman Industries: www.westerntube.com/#sle.
 3. Wheatland Tube, a division of Zekelman Industries: www.wheatland.com/#sle.
- B. Description: NFPA 70, Type EMT galvanized steel electrical metallic tubing complying with ANSI C80.3 and listed and labeled as complying with UL 797.
- C. Fittings:
 1. Description: Fittings complying with NEMA FB 1 and listed and labeled as complying with UL 514B.
 2. Material: Use steel or malleable iron.
 3. Connectors and Couplings: Use compression/gland or set-screw type.
 - a. Do not use indenter type connectors and couplings.

2.07 ACCESSORIES

- A. Conduit Joint Compound: Corrosion-resistant, electrically conductive compound listed as complying with UL 2419; suitable for use with conduit to be installed.
- B. Conduit Mechanical Seals:
 1. Listed as complying with UL 514B.
 2. Specifically designed for sealing conduit openings against water, moisture, gases, and dust.
 3. Suitable for sealing around conductors/cables to be installed.
- C. Flashing Panels for Exterior Wall Penetrations: Premanufactured components and accessories as required to preserve integrity of building envelope; suitable for conduits and facade materials to be installed.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that field measurements are as indicated.
- B. Verify that mounting surfaces are ready to receive conduits.
- C. Verify that conditions are satisfactory for installation prior to starting work.

3.02 INSTALLATION

- A. Install products in accordance with manufacturer's instructions.
- B. Install conduit in accordance with NECA 1.
- C. Intermediate Metal Conduit (IMC): Install in accordance with NECA 101.
- D. Conduit Support:
 1. Secure and support conduits in accordance with NFPA 70 using suitable supports and methods approved by authorities having jurisdiction; see Section 260529.
 2. Provide independent support from building structure. Do not provide support from piping, ductwork, or other systems.
- E. Connections and Terminations:

1. Use approved zinc-rich paint or conduit joint compound on field-cut threads of galvanized steel conduits prior to making connections.
 2. Where two threaded conduits must be joined and neither can be rotated, use three-piece couplings or split couplings. Do not use running threads.
 3. Use suitable adapters where required to transition from one type of conduit to another.
 4. Provide drip loops for liquidtight flexible conduit connections to prevent drainage of liquid into connectors.
 5. Terminate threaded conduits in boxes and enclosures using threaded hubs or double lock nuts for dry locations and raintight hubs for wet locations.
 6. Provide insulating bushings, insulated throats, or listed metal fittings with smooth, rounded edges at conduit terminations to protect conductors.
 7. Secure joints and connections to provide mechanical strength and electrical continuity.
- F. Penetrations:
1. Do not penetrate or otherwise notch or cut structural members, including footings and grade beams, without approval of Structural Engineer.
 2. Make penetrations perpendicular to surfaces unless otherwise indicated.
 3. Provide sleeves for penetrations as indicated or as required to facilitate installation. Set sleeves flush with exposed surfaces unless otherwise indicated or required.
 4. Conceal bends for conduit risers emerging above ground.
 5. Where conduits penetrate waterproof membrane, seal as required to maintain integrity of membrane.
 6. Make penetrations for roof-mounted equipment within associated equipment openings and curbs where possible to minimize roofing system penetrations. Where penetrations are necessary, seal as indicated or as required to preserve integrity of roofing system and maintain roof warranty.
 7. Install firestopping to preserve fire resistance rating of partitions and other elements; see Section 078400.
- G. Conduit Movement Provisions: Where conduits are subject to movement, provide expansion and expansion/deflection fittings to prevent damage to enclosed conductors or connected equipment. This includes, but is not limited to:
1. Where conduits cross structural joints intended for expansion, contraction, or deflection.
 2. Where conduits are subject to earth movement by settlement or frost.
- H. Conduit Sealing:
1. Use foam conduit sealant to prevent entry of moisture and gases. This includes, but is not limited to:
 - a. Where conduits enter building from outside.
 - b. Where service conduits enter building from underground distribution system.
 - c. Where conduits enter building from underground.
 - d. Where conduits may transport moisture to contact live parts.
 2. Where conduits cross barriers between areas of potential substantial temperature differential, use foam conduit sealant at accessible point near penetration to prevent condensation. This includes, but is not limited to:
 - a. Where conduits pass from outdoors into conditioned interior spaces.
 - b. Where conduits pass from unconditioned interior spaces into conditioned interior spaces.
- I. Provide grounding and bonding; see Section 260526.

3.03 FIELD QUALITY CONTROL

- A. Repair cuts and abrasions in galvanized finishes using zinc-rich paint recommended by manufacturer. Replace components that exhibit signs of corrosion.
- B. Correct deficiencies and replace damaged or defective conduits.

3.04 CLEANING

- A. Clean interior of conduits to remove moisture and foreign matter.

END OF SECTION

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SECTION 260533.16
BOXES FOR ELECTRICAL SYSTEMS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Outlet and device boxes up to 100 cubic inches (1,650 cu cm), including those used as junction and pull boxes.
- B. Cabinets and enclosures, including junction and pull boxes larger than 100 cubic inches (1,650 cu cm).

1.02 RELATED REQUIREMENTS

- A. Section 260526 - Grounding and Bonding for Electrical Systems.
- B. Section 260529 - Hangers and Supports for Electrical Systems.

1.03 REFERENCE STANDARDS

- A. NECA 1 - Standard for Good Workmanship in Electrical Construction; 2023.
- B. NECA 130 - Standard for Installing and Maintaining Wiring Devices; 2016.
- C. NEMA EN 10250 - Enclosures for Electrical Equipment (1000 Volts Maximum); 2024.
- D. NEMA FB 1 - Fittings, Cast Metal Boxes, and Conduit Bodies for Conduit, Electrical Metallic Tubing, and Cable; 2014.
- E. NEMA OS 1 - Sheet-Steel Outlet Boxes, Device Boxes, Covers, and Box Supports; 2013 (Reaffirmed 2020).
- F. NFPA 70 - National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
- G. UL 50 - Enclosures for Electrical Equipment, Non-Environmental Considerations; Current Edition, Including All Revisions.
- H. UL 50E - Enclosures for Electrical Equipment, Environmental Considerations; Current Edition, Including All Revisions.
- I. UL 508A - Industrial Control Panels; Current Edition, Including All Revisions.
- J. UL 514A - Metallic Outlet Boxes; Current Edition, Including All Revisions.

1.04 SUBMITTALS

- A. See Section 013000 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide manufacturer's standard catalog pages and data sheets for cabinets and enclosures, boxes for hazardous (classified) locations, floor boxes, and underground boxes/enclosures.

1.05 QUALITY ASSURANCE

- A. Comply with requirements of NFPA 70.
- B. Product Listing Organization Qualifications: An organization recognized by OSHA as a Nationally Recognized Testing Laboratory (NRTL) and acceptable to authorities having jurisdiction.

PART 2 PRODUCTS

2.01 BOXES

- A. General Requirements:
 - 1. Do not use boxes and associated accessories for applications other than as permitted by NFPA 70 and product listing.
 - 2. Provide all boxes, fittings, supports, and accessories required for a complete raceway system and to accommodate devices and equipment to be installed.
 - 3. Provide products listed, classified, and labeled as suitable for the purpose intended.

4. Where box size is not indicated, size to comply with NFPA 70 but not less than applicable minimum size requirements specified.
 5. Provide grounding terminals within boxes where equipment grounding conductors terminate.
- B. Outlet and Device Boxes Up to 100 cubic inches (1,650 cu cm), Including Those Used as Junction and Pull Boxes:
1. Use sheet-steel boxes for dry locations unless otherwise indicated or required.
 2. Use cast iron boxes or cast aluminum boxes for damp or wet locations unless otherwise indicated or required; furnish with compatible weatherproof gasketed covers.
 3. Use suitable concrete type boxes where flush-mounted in concrete.
 4. Use suitable masonry type boxes where flush-mounted in masonry walls.
 5. Use raised covers suitable for the type of wall construction and device configuration where required.
 6. Use shallow boxes where required by the type of wall construction.
 7. Do not use "through-wall" boxes designed for access from both sides of wall.
 8. Sheet-Steel Boxes: Comply with NEMA OS 1, and list and label as complying with UL 514A.
 9. Cast Metal Boxes: Comply with NEMA FB 1, and list and label as complying with UL 514A; furnish with threaded hubs.
 10. Boxes for Supporting Luminaires: Listed as suitable for the type and weight of load to be supported; furnished with fixture stud to accommodate mounting of luminaire where required.
- C. Cabinets and Enclosures, Including Junction and Pull Boxes Larger Than 100 cubic inches (1,650 cu cm):
1. Comply with NEMA EN 10250, and list and label as complying with UL 50 and UL 50E, or UL 508A.
 2. NEMA EN 10250 Environment Type, Unless Otherwise Indicated:
 3. Junction and Pull Boxes Larger Than 100 cubic inches (1,650 cu cm):
 - a. Provide screw-cover or hinged-cover enclosures unless otherwise indicated.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that field measurements are as indicated.
- B. Verify that mounting surfaces are ready to receive boxes.
- C. Verify that conditions are satisfactory for installation prior to starting work.

3.02 INSTALLATION

- A. Install products in accordance with manufacturer's instructions.
- B. Install boxes in accordance with NECA 1 (general workmanship) and, where applicable, NECA 130, including mounting heights specified in those standards where mounting heights are not indicated.
- C. Arrange equipment to provide minimum clearances in accordance with manufacturer's instructions and NFPA 70.
- D. Box Supports:
 1. Secure and support boxes in accordance with NFPA 70 and Section 260529 using suitable supports and methods approved by the authority having jurisdiction.
 2. Provide independent support from building structure except for cast metal boxes (other than boxes used for fixture support) supported by threaded conduit connections in accordance with NFPA 70. Do not provide support from piping, ductwork, or other systems.
- E. Install boxes plumb and level.
- F. Flush-Mounted Boxes:

1. Install boxes in noncombustible materials such as concrete, tile, gypsum, plaster, etc. so that front edge of box or associated raised cover is not set back from finished surface more than 1/4 inch (6 mm) or does not project beyond finished surface.
 2. Install boxes in combustible materials such as wood so that front edge of box or associated raised cover is flush with finished surface.
 3. Repair rough openings around boxes in noncombustible materials such as concrete, tile, gypsum, plaster, etc. so that there are no gaps or open spaces greater than 1/8 inch (3 mm) at the edge of the box.
- G. Install boxes as required to preserve insulation integrity.
- H. Install permanent barrier between ganged wiring devices when voltage between adjacent devices exceeds 300 V.
- I. Install firestopping to preserve fire resistance rating of partitions and other elements, using materials and methods specified in Section 078400.
- J. Close unused box openings.
- K. Install blank wall plates on junction boxes and on outlet boxes with no devices or equipment installed or designated for future use.
- L. Provide grounding and bonding in accordance with Section 260526.

3.03 CLEANING

- A. Clean interior of boxes to remove dirt, debris, plaster and other foreign material.

3.04 PROTECTION

- A. Immediately after installation, protect boxes from entry of moisture and foreign material until ready for installation of conductors.

END OF SECTION

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SECTION 260553
IDENTIFICATION FOR ELECTRICAL SYSTEMS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Electrical identification requirements.
- B. Identification nameplates and labels.
- C. Wire and cable markers.
- D. Voltage markers.
- E. Warning signs and labels.

1.02 RELATED REQUIREMENTS

- A. Section 260519 - Low-Voltage Electrical Power Conductors and Cables: Color coding for power conductors and cables 600 V and less; vinyl color coding electrical tape.

1.03 REFERENCE STANDARDS

- A. NFPA 70 - National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
- B. UL 969 - Marking and Labeling Systems; Current Edition, Including All Revisions.

1.04 QUALITY ASSURANCE

- A. Comply with requirements of NFPA 70.

1.05 FIELD CONDITIONS

- A. Do not install adhesive products when ambient temperature is lower than recommended by manufacturer.

PART 2 PRODUCTS

2.01 IDENTIFICATION REQUIREMENTS

- A. Identification for Equipment:
 - 1. Use identification nameplate to identify each piece of electrical distribution and control equipment and associated sections, compartments, and components.
 - a. Time Switches:
 - 1) Identify load(s) served and associated circuits controlled. Include location.
- B. Identification for Conductors and Cables:
 - 1. Color Coding for Power Conductors 600 V and Less: Comply with Section 260519.
 - 2. Use identification nameplate or identification label to identify color code for ungrounded and grounded power conductors inside door or enclosure at each piece of feeder or branch-circuit distribution equipment when premises has feeders or branch circuits served by more than one nominal voltage system.
- C. Identification for Boxes:
 - 1. Use voltage markers to identify highest voltage present.
 - 2. Use identification labels or handwritten text using indelible marker to identify circuits enclosed.

2.02 IDENTIFICATION NAMEPLATES AND LABELS

- A. Identification Nameplates:
 - 1. Manufacturers:
 - a. Brimar Industries, Inc: www.brimar.com/#sle.
 - b. Kolbi Pipe Marker Co: www.kolbipipemarkers.com/#sle.
 - c. Seton Identification Products: www.seton.com/#sle.
 - 2. Materials:

3. Plastic Nameplates: Two-layer or three-layer laminated acrylic or electrically non-conductive phenolic with beveled edges; minimum thickness of 1/16 inch (1.6 mm); engraved text.
 4. Mounting Holes for Mechanical Fasteners: Two, centered on sides for sizes up to 1 inch (25 mm) high; Four, located at corners for larger sizes.
- B. Identification Labels:
1. Manufacturers:
 - a. Brady Corporation: www.bradyid.com/#sle.
 - b. Brother International Corporation: www.brother-usa.com/#sle.
 - c. Panduit Corp: www.panduit.com/#sle.
 2. Materials: Use self-adhesive laminated plastic labels; UV, chemical, water, heat, and abrasion resistant.
 3. Text: Use factory pre-printed or machine-printed text. Do not use handwritten text unless otherwise indicated.
- C. Format for Equipment Identification:
1. Minimum Size: 1 inch (25 mm) by 2.5 inches (64 mm).
 2. Legend:
 - a. Equipment designation or other approved description.
 3. Text: All capitalized unless otherwise indicated.
 4. Minimum Text Height:
 - a. Equipment Designation: 1/2 inch (13 mm).
 5. Color:
 - a. Normal Power System: White text on black background.
- D. Format for Control Device Identification:
1. Minimum Size: 3/8 inch (10 mm) by 1.5 inches (38 mm).
 2. Legend: Load controlled or other designation indicated.
 3. Text: All capitalized unless otherwise indicated.
 4. Minimum Text Height: 3/16 inch (5 mm).
 5. Color: Black text on clear background.

2.03 WIRE AND CABLE MARKERS

- A. Manufacturers:
1. Brady Corporation: www.bradyid.com/#sle.
 2. HellermannTyton: www.hellermannntyton.com/#sle.
 3. Panduit Corp: www.panduit.com/#sle.
- B. Markers for Conductors and Cables: Use wrap-around self-adhesive vinyl cloth, wrap-around self-adhesive vinyl self-laminating, heat-shrink sleeve, plastic sleeve, plastic clip-on, or vinyl split sleeve type markers suitable for the conductor or cable to be identified.
- C. Markers for Conductor and Cable Bundles: Use plastic marker tags secured by nylon cable ties.
- D. Legend: Power source and circuit number or other designation indicated.
- E. Text: Use factory pre-printed or machine-printed text, all capitalized unless otherwise indicated.
- F. Minimum Text Height: 1/8 inch (3 mm).
- G. Color: Black text on white background unless otherwise indicated.

2.04 VOLTAGE MARKERS

- A. Markers for Boxes and Equipment Enclosures: Use factory pre-printed self-adhesive vinyl or self-adhesive vinyl cloth type markers.
- B. Minimum Size:
1. Markers for Pull Boxes: 1 1/8 by 4 1/2 inches (29 by 110 mm).
 2. Markers for Junction Boxes: 1/2 by 2 1/4 inches (13 by 57 mm).

- C. Legend:
 - 1. Markers for Voltage Identification: Highest voltage present.
- D. Color: Black text on orange background unless otherwise indicated.

2.05 WARNING SIGNS AND LABELS

- A. Comply with ANSI Z535.2 or ANSI Z535.4 as applicable.
- B. Warning Signs:
 - 1. Materials:
 - 2. Minimum Size: 7 by 10 inches (178 by 254 mm) unless otherwise indicated.
- C. Warning Labels:
 - 1. Materials: Use factory pre-printed or machine-printed self-adhesive polyester or self-adhesive vinyl labels; UV, chemical, water, heat, and abrasion resistant; produced using materials recognized to UL 969.
 - 2. Machine-Printed Labels: Use thermal transfer process printing machines and accessories recommended by label manufacturer.
 - 3. Minimum Size: 2 by 4 inches (51 mm by 102 mm) unless otherwise indicated.

PART 3 EXECUTION

3.01 PREPARATION

- A. Clean surfaces to receive adhesive products according to manufacturer's instructions.

3.02 INSTALLATION

- A. Install products in accordance with manufacturer's instructions.
- B. Install identification products to be plainly visible for examination, adjustment, servicing, and maintenance. Unless otherwise indicated, locate products as follows:
 - 1. Surface-Mounted Equipment: Enclosure front.
 - 2. Free-Standing Equipment: Enclosure front; also enclosure rear for equipment with rear access.
 - 3. Elevated Equipment: Legible from the floor or working platform.
 - 4. Interior Components: Legible from the point of access.
 - 5. Boxes: Outside face of cover.
 - 6. Conductors and Cables: Legible from the point of access.
- C. Install identification products centered, level, and parallel with lines of item being identified.
- D. Secure nameplates to exterior surfaces of enclosures using stainless steel screws and to interior surfaces using self-adhesive backing or epoxy cement.
- E. Install self-adhesive labels and markers to achieve maximum adhesion, with no bubbles or wrinkles and edges properly sealed.
- F. Mark all handwritten text, where permitted, to be neat and legible.

3.03 FIELD QUALITY CONTROL

- A. See Section 014000 - Quality Requirements, for additional requirements.
- B. Replace self-adhesive labels and markers that exhibit bubbles, wrinkles, curling or other signs of improper adhesion.

END OF SECTION

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SECTION 260583 WIRING CONNECTIONS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Electrical connections to equipment.

1.02 RELATED REQUIREMENTS

- A. Section 260519 - Low-Voltage Electrical Power Conductors and Cables.
- B. Section 260533.13 - Conduit for Electrical Systems.
- C. Section 260533.16 - Boxes for Electrical Systems.

1.03 REFERENCE STANDARDS

- A. NEMA WD 1 - General Color Requirements for Wiring Devices; 1999 (Reaffirmed 2020).
- B. NEMA WD 6 - Wiring Devices - Dimensional Specifications; 2021.
- C. NFPA 70 - National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.

1.04 QUALITY ASSURANCE

- A. Comply with requirements of NFPA 70.
- B. Product Listing Organization Qualifications: An organization recognized by OSHA as a Nationally Recognized Testing Laboratory (NRTL) and acceptable to authorities having jurisdiction.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Flexible Conduit: As specified in Section 260533.13.
- B. Wire and Cable: As specified in Section 260519.
- C. Boxes: As specified in Section 260533.16.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that equipment is ready for electrical connection, wiring, and energization.

3.02 ELECTRICAL CONNECTIONS

- A. Make electrical connections in accordance with equipment manufacturer's instructions.
- B. Make conduit connections to equipment using flexible conduit. Use liquidtight flexible conduit with watertight connectors in damp or wet locations.
- C. Connect heat producing equipment using wire and cable with insulation suitable for temperatures encountered.
- D. Provide receptacle outlet to accommodate connection with attachment plug.
- E. Provide cord and cap where field-supplied attachment plug is required.
- F. Install suitable strain-relief clamps and fittings for cord connections at outlet boxes and equipment connection boxes.
- G. Install disconnect switches, controllers, control stations, and control devices to complete equipment wiring requirements.
- H. Install terminal block jumpers to complete equipment wiring requirements.
- I. Install interconnecting conduit and wiring between devices and equipment to complete equipment wiring requirements.

END OF SECTION

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SECTION 260923
LIGHTING CONTROL DEVICES

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Time switches.
- B. Outdoor photo controls.
- C. Digital load controllers.

1.02 RELATED REQUIREMENTS

- A. Section 260519 - Low-Voltage Electrical Power Conductors and Cables.
- B. Section 260529 - Hangers and Supports for Electrical Systems
- C. Section 260533.16 - Boxes for Electrical Systems.
- D. Section 260553 - Identification for Electrical Systems: Identification products and requirements.
- E. Section 262726 - Wiring Devices: Devices for manual control of lighting, including wall switches, wall dimmers, and fan speed controllers.
- F. Section 265100 - Interior Lighting.

1.03 REFERENCE STANDARDS

- A. NECA 1 - Standard for Good Workmanship in Electrical Construction; 2023.
- B. NECA 130 - Standard for Installing and Maintaining Wiring Devices; 2016.
- C. NEMA EN 10250 - Enclosures for Electrical Equipment (1000 Volts Maximum); 2024.
- D. NFPA 70 - National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
- E. UL 773A - Nonindustrial Photoelectric Switches for Lighting Control; Current Edition, Including All Revisions.
- F. UL 916 - Energy Management Equipment; Current Edition, Including All Revisions.
- G. UL 917 - Clock-Operated Switches; Current Edition, Including All Revisions.
- H. UL 2043 - Fire Test for Heat and Visible Smoke Release for Discrete Products and Their Accessories Installed in Air-Handling Spaces; Current Edition, Including All Revisions.

1.04 ADMINISTRATIVE REQUIREMENTS

- A. Coordination:
 - 1. Coordinate placement of lighting control devices with millwork, furniture, equipment and other potential conflicts.
 - 2. Coordinate placement of photo sensors for daylighting controls with windows, skylights, and luminaires to achieve optimum operation. Coordinate placement with ductwork, piping, equipment, or other potential obstructions to light level measurement.
 - 3. Coordinate lighting control device product selections with luminaire characteristics; see Section 265100 and lighting fixture schedule.
 - 4. Notify Architect of conflicts or deviations from Contract Documents to obtain direction prior to proceeding with work.

1.05 SUBMITTALS

- A. See Section 013000 - Administrative Requirements, for submittal procedures.
- B. Product Data: Include ratings, operating modes or sequence of functions, configurations, standard wiring diagrams, dimensions, colors, service condition requirements, and installed features.
- C. Shop Drawings:

1. Digital Load Controllers: Provide dimensioned plan views indicating locations of system components, required clearances, and field connection locations. Include system interconnection schematic diagrams showing factory and field connections. Include manufacturer product characteristics and application instructions for wired and wireless applications, including start-up and commissioning.
 2. Provide wiring diagrams for all lighting controls and light fixtures included in project.
- D. Operation and Maintenance Data: Include detailed information on device programming and setup.
- E. Project Record Documents: Record actual installed locations and settings for lighting control devices.

1.06 QUALITY ASSURANCE

- A. Comply with NFPA 70.

1.07 DELIVERY, STORAGE, AND PROTECTION

- A. Store products in clean, dry space in original manufacturer's packaging in accordance with manufacturer's written instructions until ready for installation.

1.08 FIELD CONDITIONS

1.09 WARRANTY

- A. See Section 017800 - Closeout Submittals, for additional warranty requirements.
- B. Provide five year manufacturer warranty for digital load controllers.

PART 2 PRODUCTS

2.01 LIGHTING CONTROL DEVICES - GENERAL REQUIREMENTS

- A. Provide products listed, classified, and labeled as suitable for purpose intended.
- B. Unless specifically indicated as excluded, provide components necessary for complete operating system including, but not limited to, conduit, wiring, connectors, hardware, and accessories.
- C. Standards Compliance & Compatibility: Provide architectural control product with native DMX512-A control and BACnet/IP.
- D. Power failure recovery: When power is interrupted and subsequently restored, within 3 seconds lighting to automatically return to same levels prior to power failure.
- E. Control all light sources in smooth and continuous manner. Dimmers with visible steps are not acceptable.

2.02 TIME SWITCHES

- A. Manufacturers:
1. Intermatic, Inc: www.intermatic.com/#sle.
 2. NSI Industries LLC: www.nsiindustries.com/#sle.
 3. Acuity Brands Lighting, Inc. (Basis of Design)
- B. Digital Electronic Time Switches:
1. Description: Factory-assembled solid state programmable controller with LCD display, listed and labeled as complying with UL 916 or UL 917.
 2. Integrated into Digital Controller.
 3. Program Capability:
 - a. Astronomic Time Switches: Single channel, capable of different schedule for each day of week with additional holiday schedule available to override normal schedule for selected days and field-configurable astronomic feature to automatically adjust for seasonal changes in sunrise and sunset times.
 4. Schedule Capacity: Not less than 16 programmable on/off operations.
 5. Provide automatic daylight savings time and leap year compensation.
 6. Provide power outage backup to retain programming and maintain clock.

7. Manual override: Capable of overriding current schedule both permanently and temporarily until next scheduled event.
8. Provide lockable enclosure; environmental type per NEMA EN 10250 as specified for the following installation locations:
 - a. Indoor clean, dry locations: Type 1.

2.03 OUTDOOR PHOTO CONTROLS

- A. Manufacturers:
 1. Intermatic, Inc: www.intermatic.com/#sle.
 2. NSI Industries LLC: www.nsiindustries.com/#sle.
 3. Acuity Brands Lighting, Inc. (Basis of Design)
- B. Stem-Mounted Outdoor Photo Controls:
 1. Description: Direct-wired photo control unit with threaded conduit mounting stem and field-adjustable swivel base, listed and labeled as complying with UL 773A.
 2. Housing: Weatherproof, impact resistant polycarbonate.
 3. Provide external sliding shield for field adjustment of light level activation.
 4. Light Level Activation: 1 to 5 footcandles (10.8 to 53.8 lux) turn-on and 3 to 1 turn-off to turn-on ratio with delayed turn-off.
 5. Voltage: As required to control load indicated on drawings.
 6. Failure Mode: Fails to the on position.
 7. Load Rating: As required to control load indicated on drawings.
 8. Capable of integrating into the digital controller.

2.04 DIGITAL LOAD CONTROLLERS

- A. Manufacturers:
 1. Hubbell Control Solutions: www.hubbell.com/hubbellcontrolsolutions/en/#sle.
 2. Intermatic, Inc: www.intermatic.com/#sle.
 3. Acuity Brands Lighting, Inc. (Basis of Design)
- B. System Description:
 1. Stand-alone system, including interconnected modules and accessories, for lighting load, Digital Multiplex (DMX) controller as indicated on drawings, schedules, and written sequences of operation.
 2. Product standard system configurations preconfigured out of box, plug-and-play, automatically self-addressing devices for communications, and without need to field configure or program features, or requiring device setting adjustments. LEDs on unit indicate operation and troubleshooting without software intervention.
 3. Provide quantity and configuration of power and slave packs, communication modules, and load expansion modules, including associated wiring, wired and wireless components, and accessories to control loads indicated.
 4. Control up to 36 lighting channels/scenes per touch screen that include on/off, dimming, tunable white, RGB.
 5. Lighting zones/scenes can be comprised of lighting intensity, color, color temperature
 6. Modify color and color temperature using a digital color palette.
 7. Lighting zones/scenes support control of 0-10V, RGB, power packs.
 8. Integral astronomical time clock enables lighting scenes.
 9. Direct DMX control.
 - 10.
- C. General Requirements:
 1. Listed for powering and controlling line-voltage loads, power packs, contactors, relays, and other lighting control devices.
 2. Input Voltage: 24VDC
 3. Power Supply: 120-277VAC
 4. RS-485 network terminal

5. RJ-45 ports (in/out)
 6. CAT5e Ethernet network terminal
 7. DMX network terminal
 8. Provide UL 2043 plenum rated control unit with self-contained relay(s) and low-voltage class 2 transformer, compatible with specified wired and wireless sensors, components, and ballasts/drivers.
 - a. Comply with NFPA 70 for use in plenum spaces.
 - b. Provide UL 2043 plenum rating for associated system control components for control indicated.
 9. Surface Mounting: Standard junction box attachments.
 10. Provide digital controller capable of controlling light color output of light fixtures on control circuit.
 11. Control Inputs:
 - a. Digital: Two.
 - b. Analog: One.
 12. Output Control Capability:
 - a. Single Zone Switching Modules: One programmable channel.
- D. Additional Integrated Requirements for Digital Load Controllers:
1. Central Monitoring and Management: Include programmable user interface for lighting system controllable features; control access locally by plugging into devices and LAN network via browser-based software with settings retained in nonvolatile memory.
 2. Provide additional auxiliary contact closure outputs where required for functions and operating modes indicated.
 3. Scheduling:
 - a. Include timer and clock configurator for full calendar year and daylight savings automatic adjustments based on time zone.
 - b. Provide function for hold-on, designed within time limitations or other restrictions of presiding energy code.
 - c. Demand Response: Load shed or hold-off capability.
 4. Daylight Harvesting:
 - a. System Description:
 - 1) Control system with compatible control modules, power packs, contactors, or relays as required for automatic control of load indicated according to available natural light.
 - 2) System control responds to changes in measured light levels according to selected settings.
 - 3) Capable of integrating with daylighting sensors, occupancy sensors, and manual override controls.
 - b. Input Delay: To prevent unwanted cycling due to intermittent light level fluctuations.
 - c. Daylight Control Switching Modules: Unless otherwise indicated, load to be turned on when light level is below selected low set point and load to be turned off when light level is above selected high set point, with no-switching dead band between set points to prevent unwanted cycling.
 - d. Daylight Control Dimming Module Operation:
 - 1) Unless otherwise indicated, specified load to be continuously brightened as not enough daylight becomes available and continuously dimmed as enough daylight becomes available.
 - 2) Load to be turned off when available daylight is sufficient to fully dim load, after selected time delay.
 - 3) Dimming and Fade Rates: Adjustable from 5 to 60 seconds.
 - 4) Cut-Off Delay: Selectable and adjustable from 0 to 20 minutes.
 - 5) Output Voltage: Compatible with specified dimming ballasts/drivers.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that field measurements are as indicated.
- B. Verify that outlet boxes are installed in proper locations and at proper mounting heights and are properly sized to accommodate devices and conductors in accordance with NFPA 70.
- C. Verify that openings for outlet boxes are neatly cut and will be completely covered by devices or wall plates.
- D. Verify that final surface finishes are complete, including painting.
- E. Verify that branch circuit wiring installation is completed, tested, and ready for connection to lighting control devices.
- F. Verify that service voltage and ratings of lighting control devices are appropriate for service voltage and load requirements at location to be installed.
- G. Verify that conditions are satisfactory for installation prior to starting work.

3.02 INSTALLATION

- A. Install lighting control devices in accordance with NECA 1 (general workmanship) and, where applicable, NECA 130, including mounting heights specified in those standards unless otherwise indicated.
- B. Coordinate locations of outlet boxes as required for installation of lighting control devices; see Section 260533.16.
- C. Maintain separation of remote-control, signaling, and power-limited circuits.
 - 1. See manufacturer instructions and Section 260519 for control wiring conductors, wiring methods, and identification requirements.
- D. Install lighting control devices in accordance with manufacturer's instructions.
- E. Unless otherwise indicated, connect lighting control device grounding terminal or conductor to branch circuit equipment grounding conductor and to outlet box with bonding jumper.
- F. Install lighting control devices plumb and level, and held securely in place.
- G. Where required and not furnished with lighting control device, provide wall plate; see Section 262726.
- H. Provide required supports; see Section 260529.
- I. Where applicable, install lighting control devices and associated wall plates to fit completely flush to mounting surface with no gaps and rough opening completely covered without strain on wall plate. Repair or reinstall improperly installed outlet boxes or improperly sized rough openings. Do not use oversized wall plates in lieu of meeting this requirement.
- J. Identify lighting control devices; see Section 260553.
- K. Outdoor Photo Control Locations:
 - 1. Where possible, locate outdoor photo controls with photo sensor facing north. If north facing photo sensor is not possible, install with photo sensor facing east, west, or down.
 - 2. Locate outdoor photo controls so that photo sensors do not face artificial light sources, including light sources controlled by photo control itself.
- L. Install outdoor photo controls so that connections are weatherproof. Do not install photo controls with conduit stem facing up in order to prevent infiltration of water into photo control.
- M. Unless otherwise indicated, install power packs for lighting control devices above accessible ceiling or above access panel in inaccessible ceiling near sensor location.

3.03 FIELD QUALITY CONTROL

- A. See Section 014000 - Quality Requirements, for additional requirements.
- B. Inspect each lighting control device for damage and defects.

- C. Test time switches to verify proper operation.
- D. Test outdoor photo controls to verify proper operation, including time delays where applicable.
- E. Correct wiring deficiencies and replace damaged or defective conductors, cables, and lighting control devices.

3.04 ADJUSTING

- A. Adjust devices and wall plates to be flush and level.
- B. Adjust time switch settings to achieve desired operation schedule as indicated or as directed by Architect. Record settings in written report to be included with submittals.
- C. Adjust external sliding shields on outdoor photo controls under optimum lighting conditions to achieve desired turn-on and turn-off activation as indicated or as directed by Architect.

3.05 CLEANING

- A. Clean exposed surfaces to remove dirt, paint, or other foreign material and restore to match original factory finish.

3.06 CLOSEOUT ACTIVITIES

- A. Demonstration: Demonstrate proper operation of lighting control devices to Architect, and correct deficiencies or make adjustments as directed.
- B. Training: Train Owner's personnel on operation, adjustment, programming, and maintenance of lighting control devices.
 - 1. Use operation and maintenance manual as training reference, supplemented with additional training materials as required.

END OF SECTION

SECTION 265600 EXTERIOR LIGHTING

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Exterior luminaires.
- B. Ballasts.

1.02 RELATED REQUIREMENTS

- A. Section 260529 - Hangers and Supports for Electrical Systems.
- B. Section 260533.16 - Boxes for Electrical Systems.

1.03 REFERENCE STANDARDS

- A. IES LM-79 - Approved Method: Optical and Electrical Measurements of Solid-State Lighting Products; 2024.
- B. IES LM-80 - Approved Method: Measuring Maintenance of Light Output Characteristics of Solid-State Light Sources; 2021.
- C. NECA 1 - Standard for Good Workmanship in Electrical Construction; 2023.
- D. NECA/IESNA 501 - Standard for Installing Exterior Lighting Systems; 2000 (Reaffirmed 2006).
- E. NEMA 410 - Performance Testing for Lighting Controls and Switching Devices with Electronic Drivers and Discharge Ballasts; 2023.
- F. NFPA 70 - National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
- G. UL 1598 - Luminaires; Current Edition, Including All Revisions.
- H. UL 8750 - Light Emitting Diode (LED) Equipment for Use in Lighting Products; Current Edition, Including All Revisions.

1.04 ADMINISTRATIVE REQUIREMENTS

1.05 SUBMITTALS

- A. See Section 013000 - Administrative Requirements, for submittal procedures.
- B. Shop Drawings:
 - 1. Provide photometric calculations where luminaires are proposed for substitution.
- C. Product Data: Provide manufacturer's standard catalog pages and data sheets including detailed information on luminaire construction, dimensions, ratings, finishes, mounting requirements, listings, service conditions, photometric performance, weight, effective projected area (EPA), and installed accessories; include model number nomenclature clearly marked with all proposed features.
 - 1. LED Luminaires:
 - a. Include estimated useful life, calculated based on IES LM-80 test data.

1.06 QUALITY ASSURANCE

- A. Comply with requirements of NFPA 70.
- B. Product Listing Organization Qualifications: An organization recognized by OSHA as a Nationally Recognized Testing Laboratory (NRTL) and acceptable to authorities having jurisdiction.

1.07 DELIVERY, STORAGE, AND HANDLING

- A. Receive, handle, and store products according to NECA/IESNA 501 and manufacturer's written instructions.
- B. Keep products in original manufacturer's packaging and protect from damage until ready for installation.

1.08 WARRANTY

- A. See Section 017800 - Closeout Submittals, for additional warranty requirements.
- B. Provide 2-year manufacturer warranty for all LED luminaires, including drivers.

PART 2 PRODUCTS

2.01 LUMINAIRE TYPES

- A. Furnish products as indicated in luminaire schedule included on the drawings.
- B. Substitutions: See Section 016000 - Product Requirements.

2.02 LUMINAIRES

- A. Manufacturers:
 - 1. Acuity Brands, Inc: www.acuitybrands.com/#sle.
 - 2. Cooper Lighting, a division of Cooper Industries: www.cooperindustries.com/#sle.
 - 3. Hydrel
 - 4. Lumenwerx
 - 5. Substitutions: See Section 016000 - Product Requirements.
- B. Provide products that comply with requirements of NFPA 70.
- C. Provide products that are listed and labeled as complying with UL 1598, where applicable.
- D. Provide products listed, classified, and labeled as suitable for the purpose intended.
- E. Unless otherwise indicated, provide complete luminaires including lamp(s) and all sockets, ballasts, reflectors, lenses, housings and other components required to position, energize and protect the lamp and distribute the light.
- F. Unless specifically indicated to be excluded, provide all required conduit, boxes, wiring, connectors, hardware, poles, foundations, supports, trims, accessories, etc. as necessary for a complete operating system.
- G. Provide products suitable to withstand normal handling, installation, and service without any damage, distortion, corrosion, fading, discoloring, etc.
- H. Provide luminaires listed and labeled as suitable for wet locations unless otherwise indicated.
- I. Luminaires Mounted in Continuous Rows: Provide quantity of units required for length indicated, with all accessories required for joining and aligning.
- J. LED Luminaires:
 - 1. Components: UL 8750 recognized or listed as applicable.
 - 2. Tested in accordance with IES LM-79 and IES LM-80.
 - 3. LED Estimated Useful Life: Minimum of 50,000 hours at 70 percent lumen maintenance, calculated based on IES LM-80 test data.

2.03 BALLASTS AND DRIVERS

- A. Ballasts/Drivers - General Requirements:
 - 1. Provide ballasts containing no polychlorinated biphenyls (PCBs).
 - 2. Minimum Efficiency/Efficacy: Provide ballasts complying with all current applicable federal and state ballast efficiency/efficacy standards.
 - 3. Electronic Ballasts/Drivers: Inrush currents not exceeding peak currents specified in NEMA 410.
- B. Dimmable LED Drivers:
 - 1. Dimming Range: Continuous dimming from 100 percent to five percent relative light output unless dimming capability to lower level is indicated, without flicker.
 - 2. Control Compatibility: Fully compatible with the dimming controls to be installed.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that field measurements are as indicated.
- B. Verify that outlet boxes are installed in proper locations and at proper mounting heights and are properly sized to accommodate conductors in accordance with NFPA 70.
- C. Verify that suitable support frames are installed where required.
- D. Verify that branch circuit wiring installation is completed, tested, and ready for connection to luminaires.
- E. Verify that conditions are satisfactory for installation prior to starting work.

3.02 INSTALLATION

- A. Coordinate locations of outlet boxes provided under Section 260533.16 as required for installation of luminaires provided under this section.
- B. Perform work in accordance with NECA 1 (general workmanship).
- C. Install products in accordance with manufacturer's instructions.
- D. Install luminaires in accordance with NECA/IESNA 501.
- E. Provide required support and attachment in accordance with Section 260529.
- F. Install luminaires plumb and square and aligned with building lines and with adjacent luminaires.
- G. Wall-Mounted Luminaires: Unless otherwise indicated, specified mounting heights are to center of luminaire.
- H. Install accessories furnished with each luminaire.
- I. Bond products and metal accessories to branch circuit equipment grounding conductor.
- J. Install lamps in each luminaire.

3.03 FIELD QUALITY CONTROL

- A. See Section 014000 - Quality Requirements, for additional requirements.
- B. Inspect each product for damage and defects.
- C. Operate each luminaire after installation and connection to verify proper operation.
- D. Correct wiring deficiencies and repair or replace damaged or defective products. Repair or replace excessively noisy ballasts as determined by Architect.

3.04 ADJUSTING

- A. Aim and position adjustable luminaires to achieve desired illumination as indicated or as directed by Architect. Secure locking fittings in place.

3.05 CLEANING

- A. Clean surfaces according to NECA/IESNA 501 and manufacturer's instructions to remove dirt, fingerprints, paint, or other foreign material and restore finishes to match original factory finish.

3.06 CLOSEOUT ACTIVITIES

- A. Demonstration: Demonstrate proper operation of luminaires to Architect and Owner, and correct deficiencies or make adjustments as directed.

END OF SECTION