

PROJECT MANUAL

Contract No. R24-077-01

**New Stanton Manor
Exterior Renovations
PA-18-27**

at the

**118 New Stanton Manor Ct
New Stanton, PA 15672**

Prepared for:



**WESTMORELAND COUNTY HOUSING AUTHORITY
167 South Greengate Road
Greensburg, PA 15644**



December 13, 2024

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PROJECT DIRECTORY

PROJECT: NEW STANTON MANOR
EXTERIOR RENOVATIONS
118 NEW STANTON MANOR CT
NEW STANTON PA 15672

OWNER: WESTMORELAND COUNTY HOUSING AUTHORITY
167 SOUTH GREENGATE ROAD,
GREENSBURG, PA 15601
CONTACT: ERIK SPIEGEL, DIRECTOR OF ARCH. &
ENGINEERING SERVICES; ERIKS@WCHAONLINE.COM

ARCHITECT: SLEIGHTER DESIGN
1060 EBERLY WAY
LEMONT FURNACE, PA 15456
(724) 438-4010, FAX 438-4017
ROB SLEIGHTER, PRESIDENT
CONTACT: KENNETH SCHROCK, ARCHITECT
KENSCHROCK@SLEIGHTERDESIGN.COM

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SECTION 00 0015
LIST OF DRAWINGS

PART 1 – GENERAL

1.01 DRAWING LIST – OVERVIEW

- A. The following drawings, in reference to the Project, are indicated by an exact list that form a part of the above contract and shall be considered a part thereof.

1.02 DRAWING LIST - GENERAL CONSTRUCTION

A. DRAWING NO.	DRAWING TITLE
1. G0.01	COVER SHEET
2. A1.10	OVERALL SITE PLAN
3. A1.20	BUILDING 2 PLANS
4. A1.30	BUILDING 3 PLANS
5. A1.40	BUILDING 4 PLANS
6. A1.50	BUILDING 5 PLANS
7. A1.60	BUILDING 6 PLANS
8. A1.70	BUILDING 7 PLANS
9. A1.80	BUILDING 8 PLANS
10. A2.20	BUILDING 2 ELEVATIONS
11. A2.30	BUILDING 3 ELEVATIONS
12. A2.40	BUILDING 4 ELEVATIONS
13. A2.50	BUILDING 5 ELEVATIONS
14. A2.60	BUILDING 6 ELEVATIONS
15. A2.70	BUILDING 7 ELEVATIONS
16. A2.80	BUILDING 8 ELEVATIONS
17. A8.01	DOOR SCHEDULE & DOOR TYPES
18. A8.02	WINDOW TYPES & DETAILS

1.03 SUPPLEMENTAL DRAWINGS

- A. The Architect, when directed by the Owner, will furnish from time to time supplemental drawings as the work progresses for further illustration of the details of the work. But these supplemental drawings will not include the shop drawings, all of which are to be prepared by the Contractor and submitted as hereinafter specified for approval before the work is started.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

Not Used.

END OF SECTION 00 0015

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NOTICE TO BIDDERS

**PA 18-27 NEW STANTON MANOR
510 WENTSLER AVENUE
BOROUGH OF NEW STANTON – WESTMORELAND COUNTY**

**INVITATION FOR BIDS
BALCONY REPLACEMENT & EXTERIOR RENOVATION PROJECT**

- **GENERAL CONSTRUCTION CONTRACT – PA 18-27-01-2024.1 GC**

Westmoreland County Housing Authority is requesting General Construction (GC) bids for the referenced project through sealed bids which will be received by the **Westmoreland County Housing Authority**, until **January 10, 2025** at 10:00 A.M. (eastern standard time).

A **Pre-Bid Meeting** is scheduled for **Friday – December 20, 2024 at 10:00 A.M.** (eastern standard time) at **PA 18-27 NEW STANTON MANOR - 510 WENTSLER AVENUE, NEW STANTON, PA 15672**

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 Associates, Inc.** via email to lindam@wchaonline.com and eriks@wchaonline.com in accordance with the bid requirements.

Tribune Review - Advertisement Dates: December 13, 2024 and December 16, 2024
Pittsburgh Courier - December 18, 2024
Mon Valley Independent - December 18, 2024

Westmoreland County Housing Authority.

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

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DOCUMENT 00 0040

IMPORTANT INSTRUCTIONS TO ALL PRIME CONTRACTORS

PART 1 - GENERAL

1.01. REQUIRED BID SUBMISSION DOCUMENTS

- A. The following list of documents is required to be completed and submitted by the prospective bidder with their respective bid to be considered responsive.
 - 1. 00 0300 – BID FORM
 - 2. 00 0730 – EQUAL EMPLOYMENT OPPORTUNITY
 - 3. 00 0840 – NON-COLLUSIVE AFFIDAVIT
 - 4. 00 0850 – FORM OF BID BOND

1.02. BUILDING PERMITS

- A. Contractor is responsible for ALL permits, fees and licenses necessary for the proper execution and completion of the work.
- B. Contractor shall verify the cost of the building permit with the Jeannette Uniform Construction Code Office and the local municipality, prior to the date of the bid for this project. No additional payments will be made for unanticipated fees.
- C. If a re-inspection is necessary, the contractor is responsible for the re-inspection fee.

1.03. PRODUCTS OR EQUAL

- A. Products specified on the contract document and specifications by manufacturer and model number are done so to establish a level of quality. Similar products of equal value will be considered.
- B. It is the contractor's responsibility to provide adequate detail to prove the products they plan to use meet or exceed the products that have been specified in the contract documents and specifications.

1.04. DEFINITIONS

- A. "Provide": Where used in these specifications or on the drawings, means that the contractor shall "furnish and install" such item or items as may be referred to.

1.05. BID WITHDRAW

- A. If a Low Bidder elects to withdraw their bid due to a "Mathematical Error" the schedule of values will be used to fully evaluate the "Error".
- B. This project will follow the "Public Contract Bid Withdraw Law" Act of Jan. 23, 1974, P.L. 9, No.4.

PART 2 - PRODUCTS

NOT USED

PART 3 – EXECUTION

NOT USED

END OF SECTION 00 0040

DOCUMENT 00 0100
INSTRUCTIONS TO BIDDERS

HUD FORM 5369
INSTRUCTIONS TO BIDDERS FOR CONTRACTS
PUBLIC AND INDIAN HOUSING PROGRAMS

(6 PAGES)

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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 —

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

[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 (10%) 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] —

[X] (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.

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REPRESENTATIONS, CERTIFICATIONS, and
OTHER STATEMENTS of BIDDERS

HUD FORM 5369-A
REPRESENTATIONS, CERTIFICATIONS,
and
OTHER STATEMENTS of BIDDERS
PUBLIC AND INDIAN HOUSING PROGRAMS

(5 PAGES)

**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.

[x] [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. Previous Participation Certificate (applicable to construction and equipment contracts exceeding \$50,000)

(a) The bidder shall complete and submit with his/her bid the Form HUD-2530, "Previous Participation Certificate." If the successful bidder does not submit the certificate with his/her bid, he/she must submit it within three (3) working days of bid opening. Failure to submit the certificate by that date may render the bid nonresponsive. No contract award will be made without a properly executed certificate.

(b) A fully executed "Previous Participation Certificate" [] is, [] is not included with the bid.

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)

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CONTRACT PROVISIONS
REQUIRED by FEDERAL LAW

HUD FORM 5369-B
CONTRACT PROVISIONS REQUIRED BY FEDERAL LAW
PUBLIC AND INDIAN HOUSING PROGRAMS

(4 PAGES)

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

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

**Contract Provisions Required by Federal Law
or Owner Contract with the
U.S. Department of Housing and Urban Development**

Contract Provisions Required by Federal Law or Owner Contract with the U.S. Department of Housing and Urban Development

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

OMB Approval No. 2577-0157
(exp. 3/31/2020)

Public reporting burden for this collection of information is estimated to average 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. 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.

These contracts between a HUD grantee (housing agency (HA)) and an architect/engineer (A/E) for design and construction services do not require either party to submit any materials to HUD. The forms provide a contractual agreement for the services to be provided by the A/E and establishes responsibilities of both parties pursuant to the contract. The regulatory authority is 2 CFR 200. These contractual agreements are required by Federal law or regulation pursuant to 2 CFR Part 200. Signing of the contracts is required to obtain or retain benefits. The contracts do not lend themselves to confidentiality.

1.0 Contract Provisions Required by Federal Law or Owner Contract with the U.S. Department of Housing and Urban Development (HUD).

1.1 Contract Adjustments. Notwithstanding any other term or condition of this Agreement, any settlement or equitable adjustment due to termination, suspension or delays by the Owner shall be negotiated based on the cost principles stated at 48 CFR Subpart 31.2

and conform to the Contract pricing provisions of 2 CFR 200.

1.2 Additional Services. The Owner shall perform a cost or price analysis as required by 2 CFR 200 prior to the issuance of a contract modification/amendment for Additional Services. Such Additional Services shall be within the general scope of services covered by this Agreement. The Design Professional shall provide supporting cost information in sufficient detail to permit the Owner to perform the required cost or price analysis.

1.3 Restrictive Drawings and Specifications. In accordance with 2 CFR 200 and contract agreements between the Owner and HUD, the Design Professional shall not require the use of materials, products, or services that unduly restrict competition.

1.4 Design Certification. Where the Owner is required by federal regulations to provide HUD a Design Professional certification regarding the design of the Projects (24 CFR 905.312), the Design Professional shall provide such a certification to the Owner.

1.5 Retention and Inspection of Records. Pursuant to 24 CFR 85.26(i)(10) and (11), access shall be given by the Design Professional to the Owner, HUD, the Comptroller General of the United States, or any of their duly authorized representatives, to any books, documents, papers, and records of the Design Professional which are directly pertinent to that specific Contract for the purpose of making an audit, examination, excerpts, and transcriptions. All required records shall be retained for three years after the Owner or Design Professional and other subgrantees make final payments and all other pending matters are closed.

1.6 Copyrights and Rights in Data. HUD has no regulations pertaining to copyrights or rights in data as provided in 24 CFR 85.36. HUD requirements, Article 45 of the General Conditions to the Contract for Construction (form HUD-5370) requires that contractors pay all royalties and license fees. All drawings and specifications prepared by the Design Professional pursuant to this contract will identify any applicable patents to enable the general contractor to fulfil the requirements of the construction contract.

1.7 Conflicts of Interest. Based in part on federal regulations (2 CFR 200) and Contract agreement between the Owner and HUD, no employee, officer, or agent of the Owner (HUD grantee) shall participate in selection, or in the award or administration of a contract supported by Federal funds if a conflict of interest, real or apparent, would be involved.

Such a conflict would arise when:

- (i) The employee, officer or agent,
- (ii) Any member of his or her immediate family,
- (iii) His or her partner, or

(iv) An organization that employs, or is about to employ, any of the above, has a financial or other interest in the firm selected for award. The grantee's or subgrantee's officers, employees or agents will neither solicit nor accept gratuities, favors or anything of monetary value from Contractors, or parties to sub-agreements. Grantees and subgrantees may set minimum rules where the financial interest is not substantial or the gift is an unsolicited item of nominal intrinsic value. To the extent permitted by State or local law or regulations, such standards or conduct will provide for penalties, sanctions, or other disciplinary actions for violations of such standards by the grantee's and subgrantee's officers, employees, or agents or by Contractors or their agents. The awarding agency may in regulation provide additional prohibitions relative to real, apparent, or potential conflicts of interest.

Neither the Owner nor any of its contractors or their subcontractors shall enter into any Contract, subcontract, or agreement, in connection with any Project or any property included or planned to be included in any Project, in which any member, officer, or employee of the Owner, or any member of the governing body of the locality in which the Project is situated, or any member of the governing body of the locality in which the Owner was activated, or in any other public official of such locality or localities who exercises any responsibilities or functions with respect to the Project during his/her tenure or for one year thereafter has any interest, direct or indirect. If any such present or former member, officer, or employee of the Owner, or any such governing body member or such other public official of such locality or localities involuntarily acquires or had acquired prior to the beginning of his/her tenure any such interest, and if such interest is immediately disclosed to the Owner and such disclosure is entered upon the minutes of the Owner, the Owner, with the prior approval of the Government, may waive the prohibition contained in this subsection: Provided, That any such present member, officer, or employee of the Owner shall not participate in any action by the Owner relating to such contract, subcontract, or arrangement.

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

1.8 Disputes. In part because of HUD regulations (2 CFR 200), this Design Professional Agreement, unless it is a small purchase contract, has administrative, contractual, or legal remedies for instances where the Design Professional violates or breaches Agreement terms, and provide for such sanctions and penalties as may be appropriate.

1.9 Termination. In part because of HUD regulations (24 CFR 85.36(i)(2)), this Design Professional Agreement, unless it is for an amount of \$10,000 or less, has requirements regarding termination by the Owner when for cause or convenience. These include the manner by which the termination will be effected and basis for settlement.

1.10 Interest of Members of Congress. Because of Contract agreement between the Owner and HUD, no member of or delegate to the Congress of the United States of America or Resident Commissioner shall be admitted to any share or part of this Contract or to any benefit to arise from it.

1.11 Limitation of Payments to Influence Certain Federal Transaction. The Limitation on Use of Appropriated Funds to Influence Certain Federal Contracting and Financial Transactions Act, Section 1352 of Title 31 U.S.C., provides in part that no appropriated funds may be expended by recipient of a federal contract, grant, loan, or cooperative agreement to pay any person, including the Design Professional, for influencing or attempting to influence an officer or employee 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, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.

1.12 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 135, 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 135 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 preference, shall set forth minimum number and job titles subject to hire, availability of apprenticeship and training positions, the qualifications for each; and the name and location of the person(s) taking applications for each of the positions; and the anticipated date the work shall begin.

D. The contractor agrees to include this section 3 clause in every subcontract subject to compliance with regulations in 24 CFR part 135, 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 135. 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 135.

E. The contractor will certify that any vacant employment positions, including training positions, that are filled (1) after the contractor is selected but before the contract is executed, and (2) with persons other than those to whom the regulations of 24 CFR part 135 require employment opportunities to be directed, were not filled to circumvent the contractor's obligations under 24 CFR part 135.

F. Noncompliance with HUD's regulations in 24 CFR part 135 may result in sanctions, termination of this contract for default, and debarment or suspension from future HUD assisted contracts.

G. Reserved.

H. Reserved.

1.13 Reserved.

1.14 Clean Air and Water. (Applicable to contracts in excess of \$100,000). Because of 24 CFR 85.36(i)(12) and federal law, the Design Professional shall comply with applicable standards, orders, or requirements issued under section 306 of the Clean Air Act (42 U.S.C. § 1857h-4 transferred to 42 USC § 7607, section 508 of the Clean Water Act (33 U.S.C. § 1368), Executive Order 11738, and Environmental Protection Agency regulations (40 CFR part 15), on all contracts, subcontracts, and subgrants of amounts in excess of \$100,000.

1.15 Energy Efficiency. Pursuant to Federal regulations (2 C.F.R. 200) and Federal law, except when working on an Indian housing authority Project on an Indian reservation, the Design Professional shall comply with the mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (Pub. L. 94-163 codified at 42 U.S.C.A. § 6321 et. seq.).

1.16 Prevailing Wages. In accordance with Section 12 of the U.S. Housing Act of 1937 (42 U.S.C. 1437j) the Design Professional shall pay not less than the wages prevailing in the locality, as determined by or adopted (subsequent to a determination under applicable State or local law) by the Secretary of HUD, to all architects, technical engineers, draftsmen, and technicians.

1.17 Non-applicability of Fair Housing Requirements in Indian Housing Authority Contracts. Pursuant to 24 CFR section 905.115(b) title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d-2000d-4), which prohibits discrimination on the basis of race, color or national origin in federally assisted programs, and the Fair Housing Act (42 U.S.C. 3601-3620), which prohibits discrimination based on race, color, religion, sex, national origin, handicap, or familial status in the sale or rental of housing do not apply to Indian Housing Authorities established by exercise of a Tribe's powers of self-government.

1.18 Prohibition Against Liens. The Design professional is Prohibited from placing a lien on the Owner's property. This prohibition shall be placed in all design professional subcontracts.

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DOCUMENT 00 0300

BID FORM

Westmoreland County Housing Authority
New Stanton Manor Court Exterior Renovations
118 New Stanton Manor Ct
New Stanton, PA 15672

Proposal from _____, hereinafter called "Bidder".

Sirs:

Having examined the site of the work and the Contract Documents as prepared by Sleighter Design including the Drawings, Advertisement for Bid, Instructions to Bidders, Representations, Certifications and Other Statements of Bidders, Statement of Bidders Qualifications, this Bid Form, Bid/Performance/Labor and Material Bonds; Insurance Certificate, General Conditions, Supplemental Conditions of the Contract for Construction, Non-Collusive Affidavit, Supplemental General Conditions, Form of Contract, and the Technical Specifications, the undersigned submits this bid and encloses herewith a Bid Guarantee in the proper amount of 10% of the bid and payable to the Westmoreland County Housing Authority. Failure to furnish approved bonds and execute the contract within ten (10) calendar days from issuance of the award, the bid guarantee will be forfeited. Should the owner fail to make an award on this contract through no fault or failure on the part of this bidder, then the owner will return the Bid Guarantee to the Bidder.

It is hereby certified that the undersigned is the only person(s) interested in this bid as principal, and that the bid is made without collusion with any person, firm or corporation. Bidder hereby agrees to execute the contract and furnish surety company bonds in the following amounts within ten (10) calendar days after mailing by the owner of notice of award.

- a. Performance Bond in the amount of one hundred percent (100%) of the contract price.
- b. Labor and Materialmen's/Payment Bond in the amount of one hundred percent (100%) of the contract price, conditioned that the contractor will promptly pay for all material and labor supplied or performed in the prosecution of all work, whether or not the material and labor enter into and become component parts of the project.

Bidder further agrees to begin paperwork and site organization work, scheduling, assembling shop drawings and all other work possible within ten (10) calendar days after date of receipt of the executed contract. It is understood and agreed that this proposal is effective for acceptance by the Owner for a period of sixty (60) days.

Bidder agrees that, if awarded the contract, he will furnish and deliver all materials, tools, equipment, tests and transportation, secure all permits and licenses, do and perform all labor, superintendence, and all means of construction; pay all fees and do incidental work; and to execute, construct and finish in an expeditious, substantial, and workmanlike manner, in accordance with the drawings and specifications to the complete satisfaction and acceptance of the owner for the above captioned contract, and for the price hereinafter stated.

Bidder submits this bid with the understanding that all work shall be completed within 180 calendar days for the base bid.

BASE BID GENERAL CONSTRUCTION

For all General Construction work indicated on the Contract Documents herein, the sum of:

(\$ _____), _____

Wage Rate Determination Used for Bid: _____
(bidder to enter wage rate determination used)

Schedule of Values – note that the Schedule of Values HUD Form 51000 is required to be submitted with the bid documents. Reference Section 00 0040 and Section 01 2000.

Bidder's Name: _____

Bidder's Signature: _____

ALTERNATE BID ITEMS – Refer to Section 01 1230 Alternates. Alternate bid items will not be used in conjunction with building unit prices.

**DEDUCT ALTERNATE GC-1
BRICK REPOINTING**

(\$ _____)

State the amount to Deduct from the base bid, the amount for brick repointing as indicated on the drawings.

**DEDUCT ALTERNATE GC-2
BRICK REPLACEMENT**

(\$ _____)

State the amount to Deduct from the base bid, the amount for brick replacement as indicated on the drawings.

**DEDUCT ALTERNATE GC-3
BRICK SEALING**

(\$ _____)

State the amount to Deduct from the base bid, the amount for brick sealing as indicated on the drawings.

**DEDUCT ALTERNATE GC-4
ALUMINUM WINDOWS**

(\$ _____)

State the amount to Deduct from the base bid, the amount for thermal break double hung windows.

**DEDUCT ALTERNATE GC-5
GUTTERS AND DOWNSPOUTS**

(\$ _____)

State the amount to Deduct from the base bid, the amount for gutters and downspouts.

UNIT PRICES – Refer to Section 01 1270 Unit Prices

GC – 1 BRICK REPLACEMENT

(\$_____), for each brick.

The General Contractor is to provide 48 bricks for replacement as noted on the drawings in the base bid. To remove or add bricks to the contract, the contractor shall provide a unit cost per brick. This cost shall include all labor and materials.

GC – 2 BRICK REPOINTING

(\$_____), for each square foot (SF) of repointing.

The General Contractor is to provide one hundred and three (103) square feet of repointing as noted on the drawings, and an additional twenty (20) square feet of repointing in the base bid. To remove or add repointing to the contract, the contractor shall provide a unit cost per square foot. This cost shall include all labor and materials.

GC – 3 WALL SHEATHING

(\$_____), for each square foot (SF) of wall sheathing.

The General Contractor is to provide one hundred sixty(160) square feet of plywood wall sheathing to replace existing damaged or deleterious wall sheathing. To remove or to provide additional plywood sheathing, the contractor shall provide a unit cost per square foot. This cost shall include all labor and materials required for installation and demolition.

GC –4 WALL FRAMING

(\$_____), for each linear foot (LF) of wall framing

The General Contractor is to provide fifty (50) linear feet of exterior wall framing area to replace damaged, rotting, deleterious wall framing material in the base bid. The framing sizes are to match the existing framing. To remove from the contract or to provide additional framing to the contract, the contractor shall provide a unit cost per linear foot of framing that matches the sizes of the existing framing. This cost shall include all labor and materials required for installation and demolition.

GC –5 BATT INSULATION

(\$_____), for each square foot (SF) of batt insulation

The General Contractor is to provide one hundred forty (140) square feet of batt insulation to replace existing damaged or deleterious batt insulation. To remove from the contract or to provide additional insulation to the contract, the contractor shall provide a unit cost per square foot. This cost shall include all labor and materials required for installation and demolition.

GC –6 GYPSUM WALLBOARD

(\$_____), for each square foot (SF) of gypsum wallboard

The General Contractor is to provide thirty two (32) square feet of gypsum wallboard to replace gypsum wallboard over damaged, rotting, deleterious wall framing material in the base bid. To remove from the contract or to provide additional gypsum

wallboard to the contract, the contractor shall provide a unit cost per square foot. This cost shall include all labor and materials required for installation and demolition.

GC -7 ROOF SHEATHING

(\$_____), for each square foot (SF) of roof sheathing

The General Contractor is to provide sixty four (64) square feet of plywood roof sheathing to replace existing damaged or deleterious roof sheathing. To remove or to provide additional plywood roof sheathing, the contractor shall provide a unit cost per square foot. This cost shall include all labor and materials required for installation and demolition.

GC -8 ROOF FRAMING

(\$_____), for each linear foot (LF) of roof framing

The General Contractor is to provide sixty four (64) linear feet of roof framing to replace damaged, rotting, deleterious roof framing material in the base bid. The framing sizes are to match the existing framing. To remove from the contract or to provide additional roof framing to the contract, the contractor shall provide a unit cost per linear foot of roof framing that matches the sizes of the existing roof framing. This cost shall include all labor and materials required for installation and demolition.

GC -9 CONCRETE SIDEWALKS

(\$_____), for each square foot (SF) of concrete sidewalks

The General Contractor is to provide concrete sidewalks as indicated on the drawings in the base bid. To remove from the contract or to provide additional concrete sidewalks to the contract, the contractor shall provide a unit cost per square foot of concrete sidewalks. This cost shall include all labor and materials required for installation and demolition.

Addendum No.

Contract No.

Dated

Failure of Bidder to acknowledge receipt of addenda may be sufficient cause for rejection of his bid.

Bidder's Name:_____

Bidder's Signature:_____

Date:_____

END OF DOCUMENT 00 0300

DOCUMENT 00 0421

STATEMENT OF BIDDERS QUALIFICATIONS

(3 PAGES)

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STATEMENT OF BIDDER'S QUALIFICATIONS

All questions must be answered, and the data given must be clear and comprehensive. This Statement must be notarized.

1. Name of bidder _____
2. Business address _____
3. When organized _____
4. Where incorporated _____
5. How many years have you been engaged in the business for which this bid is intended under your present firm or trading name? _____
6. Credit available for this contract \$ _____
7. Contract(s) now in hand, gross amount \$ _____
8. Are you a Minority Contractor? _____
9. Are you a Female-Owned Contractor? _____
10. Number of Minority employed by your Company _____
11. Number of Females employed by your Company _____
12. Plan of organization (staffing): _____

13. Have you ever refused to sign a contract that was awarded to you? _____
14. Remarks (if any) on Item
No.13: _____
15. Will you, upon request, furnish the Westmoreland County Housing Authority with a detailed Financial Statement or any other information as the Housing Authority may require? _____
16. Have you ever defaulted on a contract? _____
17. Remarks (if any) on Item No. 16: _____

18. I.R.S. REPORTING NO. OR SOCIAL SECURITY NO. _____

19. List the 5 largest or most prestigious projects that you have completed in the past five years:

The undersigned hereby authorizes and requests any person to furnish any information requested by the Westmoreland County Housing Authority in verification of the recitals comprising this Statement of Bidder's Qualifications.

Project Name	Contract Amount	Brief Description of Work Completed	Reference Name & Phone

Dated at _____ this _____ day of _____, 20_____

By _____

Title _____

State of _____)

County of _____)

_____, being duly sworn deposes and says that he/she is the

_____ of _____ and that the answers to the

foregoing questions and all statements therein contained are true and correct.

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

NOTARY PUBLIC

My commission expires _____.

DOCUMENT 00 0700
GENERAL CONDITIONS

HUD FORM 5370
GENERAL CONDITIONS OF THE CONTRACT
FOR CONSTRUCTION
PUBLIC AND INDIAN HOUSING PROGRAMS
(20 PAGES)

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. 11/30/2023)

Applicability. This form is applicable to any construction/development contract greater than \$150,000.

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 75.3. 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.. There are no assurances of confidentiality. 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.

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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.
- (i) "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.
- (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.

2. Contractor's Responsibility for Work

-
- (b) The Architect shall serve as the Contracting Officer's technical representative with respect to architectural, 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

- (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 Schedule

- (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 of the work, and that it has investigated and satisfied itself 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 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 Construction

- (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 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 Construction

- (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 1 yr (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

The contractor shall complete all work required under this contract within 180 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

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

- (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 30 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 accordance with the terms and conditions of the subcontract.

Name: _____

Title: _____

Date: _____

- (f) Except as otherwise provided in State law, the PHA shall retain ten (10) percent of the amount of progress 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 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 \$ 250.00 [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 Convenience

- (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 \$ 1,000,000 [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 agrees as follows:

- (a) The Contractor 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 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, (3) 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 shall agree 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 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 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 shall comply with Executive Order 11246, as amended, and the rules, regulations, and orders of the Secretary of Labor.
- (g) The Contractor 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 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 is in non-compliance 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 135, 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 135 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 preference, shall set forth minimum number and job titles subject to hire, availability of apprenticeship and training positions, the qualifications for each; and the name and location of the person(s) taking applications for each of the positions; and the anticipated date the work shall begin.
- (d) The contractor agrees to include this section 3 clause in every subcontract subject to compliance with regulations in 24 CFR Part 135, 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 135. 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 135.
- (e) The contractor will certify that any vacant employment positions, including training positions, that are filled (1) after the contractor is selected but before the contract is executed, and (2) with persons other than those to whom the regulations of 24 CFR Part 135 require employment opportunities to be directed, were not filled to circumvent the contractor's obligations under 24 CFR Part 135.
- (f) Noncompliance with HUD's regulations in 24 CFR Part 135 may result in sanctions, termination of this contract for default, and debarment or suspension from future HUD assisted contracts.
- (g) With respect to work performed in connection with section 3 covered Indian housing assistance, section 7(b) of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450e) also applies to the work to be performed under this contract. Section 7(b) requires that to the greatest extent feasible (i) preference and opportunities for training and employment shall be given to Indians, and (ii) preference in the award of contracts and subcontracts shall be given to Indian organizations and Indian-owned Economic Enterprises. Parties to this contract that are subject to the provisions of section 3 and section 7(b) agree to comply with section 3 to the maximum extent feasible, but not in derogation of compliance with section 7(b).

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 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 Acts

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 \$10 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.
- (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.
- (b) 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.

DOCUMENT 00 0710

“EXHIBIT B”

THE MINORITY BUSINESS ENTERPRISE PROGRAM
IN COMPLIANCE WITH EXECUTIVE ORDER 11625
(3 PAGES)

“EXHIBIT B”

THE MINORITY BUSINESS ENTERPRISE PROGRAM
IN COMPLIANCE WITH EXECUTIVE ORDER 11625

The Westmoreland County Housing Authority hereby adopts this Affirmative Action Program for the Utilization of Minority Businesses, in compliance with Executive Order 11625.

OBJECTIVE

To affirmatively provide opportunities for business participation by Minority Businesses.

POLICY:

It is the Policy of the Westmoreland County Housing Authority to implement Executive Order 11625 that, to the fullest extent feasible, opportunities for full participation by Minority Business Enterprises will be provided.

BOUNDARIES:

There are no boundaries to the area of coverage to the Minority Business Enterprise Program. However, priority of consideration will be afforded to those sub-areas of lesser geographical definition as they relate to specific projects and opportunities.

ANALYSIS:

In order to access realistically the potential for involvement relative to Minority Business Enterprise Participation, the Small Business Administration, Department of Labor, Minority Business Directory, Employment Security Office, the Department of Housing and Urban Development, and the Department of Labor will be consulted. The Westmoreland County Housing Authority will through contract conditions, require compliance by all Contractors and Subcontractors with the intent and purpose of this Minority Business Enterprise Program.

GOALS:

Minority Business Enterprise goals will be projected on an annual basis by the Westmoreland County Housing Authority. The Annual Goals may be realized by the Westmoreland County Housing Authority through the Annual Operating Budget and/or sub-goals on specified projects.

OUTREACH:

Bidding procedures will be in compliance with Federal, State, and Local Statutes. Advertising will be done in the local newspapers once a week for a period of two (2) weeks. Also, all Minority Contractors listed in the current Minority Business Directory will be sent a copy of the advertisement. In addition, copies of the Advertisement will send to the Minority Business Opportunity Committee and Dodge Reports. Special notice will be given to community organizations, both public and private, with interest in minority affairs. All advertisements and notices will contain the Executive Order 11625 requirements.

THE MINORITY BUSINESS ENTERPRISE PROGRAM – PAGE 2

MONITORING:

The Westmoreland County Housing Authority will be responsible for the implementation and monitoring of this Program. Contracts will be monitored weekly, with a monthly report listing the extent of the minority utilization. In the event that projected goals are not met, a concentrated effort will be made in order to meet stated goals.

SANCTIONS:

Any compliance or disputes which may arise in connection with the Minority Business Enterprise Program operation will be resolved by the Westmoreland County Housing Authority. If not resolved, the matter shall be referred to the Fair Housing and Equal Opportunity Division, Pittsburgh Area Office, U.S. Department of Housing and Urban Development, for advice and assistance.

EVALUATION:

The Westmoreland County Housing Authority will, on a timely basis, with the assistance of the U.S. Department of Housing and Urban Development, evaluate the success of this Program, and take the appropriate measure to improve the operation of the Minority Business Enterprise Program.

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DOCUMENT 00 0720

“EXHIBIT C”

THE MINORITY BUSINESS ENTERPRISE PROGRAM

(4 PAGES)

“EXHIBIT C”

PART OF GENERAL CONDITIONS
PROVISIONS AND PROCEDURES
Pertaining to
THE MINORITY BUSINESS ENTERPRISE PROGRAM
IN CONNECTION WITH FEDERAL ASSISTED PROJECTS
IN COMPLIANCE WITH EXECUTIVE ORDER 11625

OBJECTIVE

The procedures set forth in this Part contain the method approved by the Secretary of Housing and Urban Development for carrying out the responsibilities under Executive Order 11625.

DEFINITION

Executive Order 11625 covered projects means any project assisted by any program administered by the Secretary of Housing and Urban Development in which loans, grants, subsidies, or other financial assistance is provided.

Minority is defined racially, to include Negro/black, Spanish American, American Indian, Oriental, and others, not ethnically.

Work – is defined for purposes of Executive Order 11625 as construction or construction related activities including the purchase of goods, supplies and services.

ASSURANCE OF COMPLIANCE

Every contractor and subcontractor shall incorporate, or cause to be incorporated, in all contracts for work in connection with a Federally assisted project the following:

- A. 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 executive Order 11625.
- B. The parties to this contract will comply with the intent and purposes of said Executive Order 11625, and all applicable procedures issued there under 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 would prevent them from complying with these requirements.
- C. The contractor will send to appropriate minority organizations or representative(s) of minority(s) a notice advising the said minority organization or representative of his commitments under this Executive Order 11625 and shall retain copies of the notice in an appropriate file available for inspection by authorized party(s).
- D. The contractor will include this Executive Order 11625 clause in every subcontract for work in connection with the project and will, at the directions of the applicant for or recipient of Federal financial assistance, take appropriate action pursuant to the subcontract upon a finding that the subcontractor is in non-compliance. The contractor will not subcontract with any subcontractor where it has notice or knowledge that the latter will not participate and will not let any

- subcontract unless the subcontractor has first provided it with a preliminary statement of goals to comply with the intent and purpose of these procedures.
- E. Compliance with the provisions of Executive Order 11625, the intent and purpose thereof, 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, to these sanctions specified by the grant or loan agreement or contract through which Federal assistance is provided.

PROCEDURES

Prior to the signing of the contract, the contractor shall provide a preliminary statement of minority business utilization where known; where not known, such information shall be supplied prior to the signing of any contract between the contractor and subcontractor.

UTILIZATION OF BUSINESSES

Each contractor and subcontractor undertaking work on an Executive Order 11625 covered object shall assure that to the greatest extent feasible, contracts for work to be performed connection with the projects are awarded to minority business concerns.

AFFIRMATIVE ACTION PLAN FOR UTILIZATION OF MINORITY BUSINESS

The contractor or subcontractor shall utilize minority business concerns in contracting for work to be performed in connection with the completion of the contract. To this end the contractor or subcontractor projects a utilization goal of \$_____ or _____
% of total dollar amount, \$_____.

GOAL ALLOCATIONS

Category Dollars	Amount Available in Dollars	Amount Project in
Minority Business	\$_____	\$_____
Minority Contractors	\$_____	\$_____

Set forth the dollar value of contracts to be awarded to eligible contractors and businesses within each category over the duration of this contract.

Analyze the minority potential for each category and set projected utilization goals for minority participation.

Ensure that the appropriate business concerns are timely notified of pending contractual opportunities either personally or through locally utilized media.

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:

- A. Local advertising
- B. Small Business Administration
- C. Signs placed at the site.
- D. U.S. Department of Commerce Funded Agency
- E. Community Organizations
- F. U.S. Department of Housing and Urban Development

CERTIFICATION OF COMPLIANCE

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

MINORITY BUSINESS UTILIZATION CERTIFICATION

_____ Will abide by and initiate in all their subcontracts, to the greatest extent feasible, the requirements of Executive Order 11625.

DATE

TITLE

DOCUMENT 00 0730

“EXHIBIT D”
(NOTE: EXHIBIT E – NOT USED)

STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY
CONSTRUCTION CONTRACT SPECIFICATIONS

(6 PAGES)

“EXHIBIT D”

41 CFR 60 – 4.3

GENERAL CONDITIONS

Standard Federal Equal Employment Opportunity Construction Contract
Specifications (Executive Order 11246)

1. As used in these specifications:
 - a) “Covered area” means the geographical area described in the solicitation from which this contract resulted.
 - b) “Director” means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority.
 - c) “Employer identification number” means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.
 - d) “Minority” includes:
 - i. Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
 - ii. Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race)
 - iii. 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
 - iv. American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).
2. 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.
3. 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 goals 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 Contractors or Subcontractors toward a goal in an approved Plan does not excuse any covered Contractor's or Subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.
4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7 a 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 the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. Covered Construction contractors performing construction work in geographical areas where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. Goals are published periodically in the Federal Register in notice form, and such notices may be obtained from any Office of Federal Contract Compliance Programs office or from Federal procurement contracting officers. The Contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specified.
5. 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.

6. 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.
7. The Contractor shall take specific affirmative actions 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 actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:
 - a) 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 foremen, 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.
 - b) 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 organizations' responses.
 - c) 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 therefore, along with whatever additional actions the Contractor may have taken.
 - d) 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 woman 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.
 - e) 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 compiled under 7b above.
 - f) 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.
 - g) Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with onsite supervisory personnel such as Superintendents, General Foremen, 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.
 - h) 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.
- i) 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 any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.
 - j) 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.
 - k) Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.
 - l) 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.
 - m) Ensure that seniority practices, 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.
 - n) 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.
 - o) Document and maintain a record of all solicitations of offers or subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.
 - p) Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.
8. 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, ensures 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.
9. 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 underutilized).
10. 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.
11. The Contractor shall not enter into any Subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.
12. 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 its 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.

13. 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.
14. 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 numbers, 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.
15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

EXECUTIVE ORDER 11246 CERTIFICATION

_____ will abide by and initiate in all subcontracts, to the greatest extent feasible, the requirements of Executive Order 11246.

Title

Date

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“EXHIBIT F”

EXECUTIVE ORDER NO. 12138
(8 PAGES)

"EXHIBIT "F"

EXECUTIVE ORDER NO. 12138

May 18, 1979, 44 F.R. 29637

CREATING A NATIONAL WOMEN'S BUSINESS ENTERPRISE POLICY

AND PRESCRIBING ARRANGEMENTS FOR DEVELOPING, COORDINATING

AND IMPLEMENTING A NATIONAL PROGRAM FOR WOMEN'S BUSINESS ENTERPRISE

In response to the findings of the Interagency Task Force on Women Business Owners and congressional findings that recognize:

1. The significant role which small business and women entrepreneurs can play in promoting full employment and balanced growth in our economy.
2. The many obstacles facing women entrepreneurs; and
3. The need to aid and stimulate women's business enterprise.

RESPONSIBILITIES OF THE FEDERAL DEPARTMENTS AND AGENCIES

Within the constraints of statutory authority and as otherwise permitted by law:

- (A) Each department and agency of the Executive Branch shall take appropriate action to facilitate, preserve and strengthen women's business enterprise and to ensure full participation by women in the free enterprise system.
- (B) Each department and agency shall take affirmative action in support of women's business enterprise in appropriate programs and activities including but not limited to:
 1. Management, technical, financial and procurement assistance.
 2. Business-related education, training, counseling information dissemination, and
 3. Procurement.
- (C) Each department or agency empowered to extend Federal financial assistance to any program or activity shall issue regulations requiring the recipient of such assistance to take appropriate affirmative action in support of women's business enterprise and to prohibit actions or policies which discriminate against women's business enterprise on the ground of sex. For purposes of this subsection, Federal financial assistance means assistance extended by way of grant, cooperative agreement, loan or contract other than a contract of insurance or guaranty. These regulations shall prescribe sanctions for noncompliance. Unless otherwise specified by law, no agency sanctions shall be applied until the agency or department concerned has advised the appropriate person or persons of the failure to comply with its regulations and has determined that compliance cannot be secured by voluntary means.

For purposes of this Order, affirmative action may include, but is not limited to, creating or supporting new programs responsive to the special needs of women's business enterprise, establishing incentives to promote business or business-related opportunities for women's business enterprise, collecting and disseminating information in support of women's business enterprise, and insuring to women's business enterprise knowledge of and ready access to business-related services and resources. If, in implementing this Order, an agency undertakes to use or to require compliance with numerical set-asides, or similar measures, it shall state the purpose of such measure, and the measure shall be designed on the basis of pertinent factual findings of discrimination against women's business enterprise and the need for such measure.

In carrying out their responsibilities under Section 1-1, the departments and agencies shall consult the Department of Justice, and the Department of Justice shall provide legal guidance concerning these responsibilities.

ESTABLISHMENT OF THE INTERAGENCY COMMITTEE ON WOMEN'S BUSINESS ENTERPRISE

To help insure that the actions ordered above are carried out in an effective manner, I hereby establish the Interagency Committee on Women's Business Enterprise (hereinafter called the Committee).

EXECUTIVE ORDER NO. 12138

Chairperson of the Committee (hereinafter called the Chairperson) shall be appointed by the President. The Chairperson shall be the presiding officer of the Committee and shall have such duties as prescribed in this Order or by the Committee in its rules of procedure. The Chairperson may also represent his or her department, agency or office on the Committee.

Committee shall be composed of the Chairperson and other members appointed by the heads of departments and agencies from among high level policy-making officials. In making these appointments, the recommendations of the Chairperson shall be taken into consideration. The following departments and agencies and such other departments and agencies as the Chairperson shall select shall be members of the Committee: the Departments of Agriculture; Commerce; Defense; Energy; Health and Human Services; Housing and Urban Development; Interior; Justice; Labor; Transportation; Treasury; the Federal Trade Commission; General Services Administration; National Science Foundation; Office of Federal Procurement Policy; and the Small Business Administration. These members shall have a vote. Nonvoting members shall include the Executive Director of the Committee and at least one but no more than three representatives from the Executive Office of the President appointed by the President.

Committee shall meet at least quarterly at the call of the Chairperson, and at such other times as may be determined to be useful according to the rules of procedure adopted by the Committee.

Administrator of the Small Business Administration shall provide an Executive Director and adequate staff and administrative support for the Committee. The staff shall be located in the Office of the Chief Counsel for Advocacy of the Small Business Administration, or in such other office as may be established specifically to further the policies expressed herein. Nothing in this Section prohibits the use of other properly available funds and resources in support of the Committee.

FUNCTIONS OF THE COMMITTEE

Promote, coordinate and monitor the plans, programs and operations of the departments and agencies of the Executive Branch which may contribute to the establishment, preservation and strengthening of women's business enterprise. It may, as appropriate, develop comprehensive interagency plans and specific program goals for women's business enterprise with the cooperation of the departments and agencies.

Establish such policies, definitions, procedures and guidelines to govern the implementation, interpretation and application of this order, and generally perform such functions and take such steps as the Committee may deem to be necessary or appropriate to achieve the purposes and carry out the provisions hereof.

Promote the mobilization of activities and resources of State and local governments, business and trade associations, private industry, colleges and universities, foundations, professional organizations, and volunteer and other groups toward the growth of women's business enterprise, and facilitate the coordination of the efforts of these groups with those of the departments and agencies.

Make an annual assessment of the progress made in the Federal Government toward assisting women's business enterprise to enter the mainstream of business ownership and to provide recommendations for future actions to the President.

Convene and consult as necessary with persons inside and outside government to develop and promote new ideas concerning the development of women's business enterprise.

Consider the findings and recommendations of government and private sector investigations and studies of the problems of women entrepreneurs and promote further research into such problems.

Design a comprehensive and innovative plan for a joint Federal and private sector effort to develop increased numbers of new women-owned businesses and larger and more successful women-owned businesses. The plan should set specific reasonable targets which can be achieved at reasonable and identifiable costs and should provide for the measurement of progress towards these targets at the end of two and five years. Related outcomes such as income and tax revenues generated, jobs created, new products and services introduced, or new domestic or foreign markets created should also be projected and measured in relation to costs wherever possible. The Committee should submit the plan to the President for approval within six months of the effective date of this Order.

EXECUTIVE ORDER NO. 12138

OTHER RESPONSIBILITIES OF THE FEDERAL DEPARTMENTS AND AGENCIES

The head of each department and agency shall designate a high-level official to have the responsibility for the participation and cooperation of that department or agency in carrying out this Executive order. This person may be the same person who is the department or agency's representative to the Committee.

To the extent permitted by law, each department and agency upon request by the Chairperson shall furnish information, assistance and reports and otherwise cooperate with the Chairperson and the Committee in the performance of their functions hereunder. Each department or agency shall ensure that systematic data collection processes are capable of providing the Committee current data helpful in evaluating and promoting the efforts herein described.

The officials designated under Section 1-401, when so requested, shall review the policies and programs of the women's business enterprise program, and shall keep the Chairperson informed of proposed budget, plans and programs of their departments or agencies affecting women's business enterprise.

Each Federal department or agency, within constraints of law, shall continue current efforts to foster and promote women's business enterprise and to support the program herein set forth, and shall cooperate with the Chairperson and the Committee in increasing the total Federal effort.

REPORTS

The Chairperson shall, promptly after the close of the fiscal year, submit to the President a full report of the activities of the Committee hereunder during the previous fiscal year. Further, the Chairperson shall, from time to time, submit to the President the Committee's recommendations for legislation or other action to promote the purposes of this Order.

Each Federal department and agency shall report to the Chairperson as hereinabove provided on a timely basis so that the Chairperson and the Committee can consider such reports for the Committee report to the President.

DEFINITIONS

For the purposes of this Order, the following definitions shall apply:

(1) "Women-owned business" means a business that is at least 51 percent owned by a woman or women who also control and operate it. "Control" in this context means exercising the power to make policy decisions. "Operate" in this context means being actively involved in the day-to-day management.

(2) "Women's business enterprise" means a woman-owned business or businesses or the efforts of a woman or women to establish, maintain or develop such a business or businesses.

Nothing in subsections 1-601 or 1-602 of this Section (1-6) should be construed to prohibit the use of other definitions of a woman-owned business or women's business enterprise by departments and agencies of the Executive Branch where other definitions are deemed reasonable and useful for any purpose not inconsistent with the purposes of this Order. Wherever feasible, departments and agencies should use the definition of a woman-owned business in subsection 1-601 above for monitoring performance with respect to women's business enterprise in order to assure comparability of data throughout the Federal Government.

CONSTRUCTION

Nothing in this Order shall be construed as limiting the meaning or effect of any existing Executive order.

EXECUTIVE ORDER 12138

ASSURANCE OF COMPLIANCE

Every Contractor and Subcontractor shall incorporate, or cause to be incorporated, in all contracts for work in connection with a Federally assisted project the following:

- A. The work to be performed under this Contract is on a project assisted basis under a program providing direct Federal Financial Assistance from the Department of Housing and Urban Development and is subject to the requirements of Executive Order 12138.
- B. The parties to this Contract will comply with the intent and purposes of said Executive Order 12138, and all applicable procedures 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 would prevent them from complying with these requirements.
- C. The Contractor will send to appropriate woman-owned business organizations a notice advising the organization of their commitment under this Executive Order 12138 and shall retain copies of the notice in an appropriate file available for inspection by authorized parties.
- D. The Contractor will include this Executive Order 12138 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 sub-contract upon a finding that the subcontractor is in non-compliance. The Contractor will not subcontract with any subcontractor where it has notice or knowledge that the latter will not participate and will not let any subcontract unless the subcontractor has first provided the contractor with a preliminary statement of goals to comply with the intent and purpose of these procedures.
- E. Compliance with the provisions of Executive Order 12138, the intent and purpose, thereof, 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, to these sanctions specified by the grant or loan agreement or contract through which Federal assistance is provided.

BIDDING PROCEDURES

Prior to signing of the Contract, the contractor shall provide a preliminary statement of woman-owned business enterprise utilization where known; where not known, such information shall be supplied prior to signing of any contract between the contractor and subcontractor.

UTILIZATION OF BUSINESSES

Each contractor and subcontractor undertaking work on an Executive Order 12138 covered project shall assure to the greatest extent feasible, contracts for work to be performed in connection with the projects are awarded to woman-owned business concerns.

AFFIRMATIVE ACTION PLAN FOR UTILIZATION OF WOMAN-OWNED BUSINESS ENTERPRISE

The contractor or subcontractor shall utilize woman-owned business concerns in contracting the work to be performed in connection with the completion of the Contract. To this end, the contractor or subcontractor projects a utilization goal of \$_____ or _____%

EXECUTIVE ORDER 12138

GOAL ALLOCATIONS

<u>Category</u>	<u>Amount Available (Dollars)</u>	<u>Amount Projected (Dollars)</u>
A. Woman-Owned Business \$_____	\$_____	
B. Woman-Owned Contractors \$_____	\$_____	

Set forth the dollar value of contracts to be awarded to eligible contractors and businesses within each category over the duration of the Contract.

Analyze the woman-owned potential for each category and set projected utilization goals for women-owned business participation.

Ensure that the appropriate business concerns are timely notified of pending contractual opportunities either personally or through locally utilized media.

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:

- A. Local Advertising
- B. Small Business Administration
- C. Signs placed at the site
- D. U.S. Department of Commerce Funded Agency
- E. Community Organizations
- F. U.S. Department of Housing and Urban Development

CERTIFICATE OF COMPLIANCE

The contractor shall execute the Certificate of Compliance and shall cause all subcontractors undertaking work in connection with this Contract to furnish the same.

WOMAN-OWNED BUSINESS ENTERPRISE UTILIZATION CERTIFICATION

_____ will abide by and initiate in all their subcontracts, to the greatest extent feasible, the requirements of Executive Order 12138.

CONTRACTOR OR SUBCONTRACTOR

BY _____

TITLE _____

DATE _____

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PROVISIONS AND PROCEDURES PERTAINING TO
EMPLOYMENT 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

(7 PAGES)

PART OF GENERAL CONDITIONS

PROVISIONS AND PROCEDURES

Pertaining to
EMPLOYMENT OPPORTUNITIES FOR BUSINESS AND LOWER INCOME PERSONS
IN CONNECTION WITH FEDERAL ASSISTED PROJECTS

Incompliance with
SECTION 3 OF THE HOUSING AND URBAN DEVELOPMENT ACT OF 1968

SEC. 4.1 – Purpose and Scope

The regulations set forth in this Part 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.

Sec. 4.2 Definitions

“Section 3 covered project” means any nonexempt 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, redevelopment or renewal, public or community facilities, and new community development, except as provided under Title 24, Part 135, Section 135.5, para. (M).

Sec. 4.3 Assurance of Compliance

Every contractor and subcontractor shall incorporate, or cause to be incorporated, in all contract for work in connection with a Section 3 covered project, the following clause:

- A. 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. 1701u. Section 3 requires that to the greatest extent feasible opportunities for training and employment be given 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.
- B. The parties to this contract will comply with the provisions of said Section 3 and the regulations issued pursuant thereto by the Secretary of Housing and Urban

Development set forth in 24 CFR 135, and all applicable rules and orders of the Department issued there under 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 would prevent them from complying with these requirements.

- C. 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.

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 a finding that the subcontractor is in violation of regulations issued by the Secretary of Housing and Urban Development, 24 CFR 135. The contractor will

not subcontract with any subcontractor where it has notice or knowledge that the latter has been found in violation of regulations under 24 CFR 135 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.

Compliance with the provisions of Section 3, the regulations set forth in 24 CFR 135, and all applicable rules and orders 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 or contract through which Federal assistance is provided, and to such sanctions as are specified by 24 CFR 135, 135.

Section 4.4 Bidding Procedures

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.

Section 4.A Trainees

The contractor or subcontractor shall fulfill his obligation to utilize lower income project areas residents as trainees to the greatest extent feasible by:

- (1) Utilizing the maximum number of persons in the various training categories in all phases of the work to be performed under the Section 3 covered project, and
- (2) Filling 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.
- (3) "Manpower Utilization Training Table" - See Appendix #1.

Section 4.B Residents as Employees

Each contractor and subcontractor shall fulfill his obligation to utilize lower income project areas residents as employees to the greatest extent feasible by:

- (1) 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.
- (2) Identifying the number of positions currently occupied by regular, permanent employees.
- (3) Identifying the positions not currently occupied by regular, permanent employees.
- (4) Establishing the positions identified in 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 residents of the Section 3 covered project areas.
- (5) "Work Force Needs Table" – See Appendix #1.

Section 4.C Utilization of Businesses

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 Section 3 covered project areas or business concerns owned in substantial part by persons residing in the Section 3 covered area.

- (1) "Business Utilization Table" – See Appendix #2.

Section 4.5 Good Faith Effort

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:

- A. 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 Industrialization Center (OIC) and WCHA
- B. 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 person if otherwise eligible and/or qualified and if a vacancy exists. If no vacancies exist, the listed for the first available opening.

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 immediate 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.

Section 4.6 Affirmative 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 businesses 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 areas such as P.A.C., OIC, and WCHA, and any equivalent organization.

C. "Business Utilization Table."

See Appendix #2

D. "AAP Form."

See Appendix #2

Sec. 4.7 Certificate 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.

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. 1701 u.

APPENDIX NO. 1

1. MANPOWER UTILIZATION TABLE

Occupation Category (Write List)	Total Work Force	Skilled	Trainees	No. Project Area Resident to be Utilized
				<u>Skilled</u> <u>Trainee</u>
Total				

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 lower income employees stated above utilizing such community-based organizations and service agencies as _____, Opportunities Industrialization Center (OIC); and on the site company employment posters.
- C. The Company certifies that the employee goals listed in the above table approximates the ratio of lower income residents to the total population of the project area.

COMPANY

BY _____
Authorized Signature

Title _____

Date _____

APPENDIX NO. 2

AFFIRMATIVE ACTION PLAN FOR UTILIZATION OF SECTION 3 PROJECT BUSINESSES

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:_____.

Subcontracts	Total Subcontract Dollar Amount	Proposed Section 3 Business Available For Use	Total Subcontract to Section 3 Businesses Dollar Amount
(Write List)			

COMPANY

By _____
Authorized Signature

Title_____

Date_____

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DOCUMENT 00 0770

PREVIOUS PARTICIPATION CERTIFICATION

HUD FORM 2530

(5 PAGES)

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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 (See instructions) 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) <input type="checkbox"/> Existing <input type="checkbox"/> Rehabilitation <input type="checkbox"/> 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:
- 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;
 - The controlling participants have no defaults or noncompliance under any Conventional Contract or Turnkey Contract of Sale in connection with a public housing project;
 - 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;
 - There has not been a suspension or termination of payments under any HUD assistance contract due to the controlling participant's fault or negligence;
 - 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);
 - 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;
 - 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 initialed 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, 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	<input type="checkbox"/> A. No adverse information; form HUD-2530 approval recommended. <input type="checkbox"/> B. Name match in system	<input type="checkbox"/> C. Disclosure or Certification problem <input type="checkbox"/> D. Other (attach memorandum)
Staff	Processing and Control		
Signature of authorized reviewer		Signature of authorized reviewer	Approved <input type="checkbox"/> Yes <input type="checkbox"/> 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.

DOCUMENT 00 0840

NON-COLLUSIVE AFFIDAVIT

(2 PAGES)

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Non-Collusive Affidavit

STATE OF _____: CONTRACT/BID NO. _____
COUNTY OF _____: :S.S.

I state that I am the _____ of _____,
(TITLE) (FIRM OR COMPANY)

and that I am authorized to make this Affidavit on behalf of my Firm or Company, and its owners, directors, and officers. I am the person responsible in my Firm or Company for the prices (s) and the amount of this Bid.

I state that:

- (1) The price (s) and amount of this Bid have been arrived at independently and without consultation, communication or agreement with any other contractor, bidder, or potential bidder.
- (2) Neither the price (s) nor the amount of this Bid, and neither the approximate price (s) nor the approximate amount of this Bid have been disclosed to any other firm or person who is a bidder or potential bidder, and they will not be disclosed to any other firm or person who is a bidder or potential bidder, and they will not be disclosed before bid opening.
- (3) No attempt has been made or will be made to induce any firm or person to refrain from bidding on this Contract, or to submit a bid higher than this bid, or to submit any intentionally high or noncompetitive bid or other form of complementary bid.
- (4) The bid of my Firm or Company is made in good faith and not pursuant to any agreement or discussion with, or inducement from, any firm or person to submit a complementary or other noncompetitive bid.
- (5) _____, its affiliates, subsidiaries,
(FIRM OR COMPANY)
officers, directors and employees are not currently under investigation by any governmental agency and have not in the last four years been convicted or found liable of any act prohibited by State or Federal Law in any jurisdiction, involving conspiracy or collusion with respect to bidding on any public contract, except as follows:

I state that _____ understands and acknowledges
(FIRM OR COMPANY)

that the above representations are material and important, and will be relied on by the Westmoreland County Housing Authority in awarding the contract (s) for which this bid is submitted. I understand and my Firm Or Company understands that any misstatement in this Affidavit is and shall be treated as fraudulent concealment from the Westmoreland County Housing Authority of the true facts relating to the submission of bids for this contract.

(NAME AND FIRM OR COMPANY POSITION)

SWORN TO AND SUBSCRIBED BEFORE ME

THIS _____ DAY OF

_____, 20_____

NOTARY PUBLIC

My Commission Expires_____

DOCUMENT 00 0845

PUBLIC WORKS EMPLOYMENT VERIFICATION FORM

(2 PAGES)

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COMMONWEALTH OF PENNSYLVANIA

PUBLIC WORKS EMPLOYMENT VERIFICATION FORM

Date _____

Business or Organization Name (Employer) _____

Address _____

City _____ State _____ Zip Code _____

.....Contractor.....O.....

Contracting Public Body _____

Contract/Project No _____

Project Description _____

Project Location _____

As a contractor/subcontractor for the above referenced public works contract, I hereby affirm that as of the above date, our company is in compliance with the Public Works Employment Verification Act ('the Act') through utilization of the federal E-Verify Program (EVP) operated by the United States Department of Homeland Security. To the best of my/our knowledge, all employees hired post January 1, 2013 are authorized to work in the United States.

It is also agreed to that all public works contractors/subcontractors will utilize the federal EVP to verify the employment eligibility of each new hire within five (5) business days of the employee start date throughout the duration of the public works contract. Documentation confirming the use of the federal EVP upon each new hire shall be maintained in the event of an investigation or audit.

I, _____, authorized representative of the company above, attest that the information contained in this verification form is true and correct and understand that the submission of false or misleading information in connection with the above verification shall be subject to sanctions provided by law.

Authorized Representative Signature

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Document 00 0850

Form of Bid Bond

(3 Pages)

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we the undersigned,
_____, as PRINCIPAL, and
(Name of Principal)

_____, as SURETY are held and
(Name of Surety)

firmly bound unto **Westmoreland County Housing Authority**, herein after called the "LHA" 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 these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the Principal has submitted the accompanying bid dated _____, 20____, for _____

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 therefore, or, if no period be specified therefore, 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 LHA 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. In the event of the 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 the LHA the difference between the amount specified in said bid and the amount for which the LHA 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 WITNESSES WHEREOF, the above-bounden parties have executed this instrument under their several seals this _____ day of _____, 20____, 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:

(Individual Principal) _____ (SEAL)

(Business Address)

(Individual Principal) _____ (SEAL)

(Business Address)

Attest:

(Corporate Principal)

(Business Address)

By _____ Affix
Corporate
Seal

Attest:

(Corporate Surety)

(Business Address)

By _____ Affix
Corporate
Seal

(Power-of-attorney for person signing for surety must be attached to bond.)

CERTIFICATE AS TO CORPORATE PRINCIPAL

I, _____, certify that I am _____ Secretary
of the corporation named as Principal in the within bond; that _____ who signed
the said bond on behalf of the Principal was then _____ of said corporation; that I
know the signature, and signature thereto is genuine; and that said bond was duly signed, sealed and
attested to for and in behalf of said corporation by authority of its governing body.

_____ (Corporate Seal)

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DOCUMENT 00 0860

PERFORMANCE AND LABOR AND MATERIALS BOND

INSTRUCTIONS – 1 PAGE
PERFORMANCE BOND – 2 PAGES
LABOR AND MATERIALMEN'S BOND – 3 PAGES
(7 PAGES)

**DIRECTIONS FOR PREPARATION OF PERFORMANCE AND
LABOR AND MATERIALMEN'S BOND**

1. Individual sureties, partnerships, or corporations not in the surety business will not be acceptable.
2. The name of the Principal shall be shown exactly as it appears in the contract.
3. The penal sum shall be not less than that required by the specifications.
4. If the Principals are partners, or joint venturers, each member shall execute the bond as an individual, with his place of residence shown.
5. If the Principal is a corporation, the bond shall be executed under its corporate seal. If the corporation has no corporate seal the fact shall be stated, in which case a scroll or adhesive seal shall be affixed following the corporate name.
6. The official character and authority of the person(s) executing the bond for the Principal, if a corporation, shall be certified by the secretary or assistant secretary thereof under the corporate seal, OR there may be attached copies of so much of the records of the records of the corporation as will evidence the official character and authority of the officer signing, duly certified by the secretary or assistant secretary, under the corporate seal, to be true copies.
7. The current Power-of-Attorney of the person signing for the surety company must be attached to the bond.
8. The date of the bond must NOT be prior to the date of the surety company.
9. The Surety Company's Bond must include:
 - a. The rate of premium in dollars per thousand; and
 - b. The total dollar amount premium charged.
10. The signature of a witness shall appear in the appropriate place attesting to the signature of each party to the bond.
11. Type or print the name underneath EACH SIGNATURE appearing on the bond.
12. An executed copy of the bond must be attached to each copy of the Contract (Original Counterpart) intended for signing.

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS, that we

_____, as **Principal**, and
(Name of Principal)

_____, as **Surety**, are held and
(Name of Surety)

firmly bound unto the Westmoreland County Housing Authority, their certain attorney, successors or assigns (hereinafter called the **Obligee**), in the penal sum of _____ Dollars, (\$_____), lawful money of the United States, for the payment of which sum will and truly to be made, we bind ourselves, our heirs, administrators, executors, successors, and assigns, jointly and severally, firmly by these presents.

WHEREAS, said Principal has entered into a certain Contract with said Obligee (hereinafter called the Contract), dated _____, 20_____, for

_____ which Contract and the Specifications for said work shall be deemed a part hereof as fully as if set out herein.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the Principal shall faithfully perform the Contract and his part at the time and in the manner therein provided and satisfy all claims and demands incurred in or for the same, or growing out of the same, or for injury or damage to persons or property in the performance thereof, and shall fully indemnify and save harmless the said Obligee from any and all cost and damage which the said Obligee may suffer by reason to do so, and shall fully reimburse and repay the said Obligee any and all outlay and expense which it may incur by reason of any such default, then this obligation shall be null and void, otherwise it shall remain in full force and virtue.

The said Surety, for the value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or to the work to be performed or the Specifications accompanying the same shall in any way affect its obligation on this Bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the Terms of the contract or to the work or the Specifications.

IN WITNESS WHEREOF, the above bounded parties have executed this Instrument under their several seals this _____ day of _____, 20____, the name and corporate seal of each corporate party brings hereto affix, and these presents duly signed by its undersigned representative, pursuant to the authority of its governing body.

Individual Principals Sign Here
In the presence of:

_____(SEAL)
(Individual Principal)

(Business Address)

_____(SEAL)
(Individual Principal)

(Business Address)

Corporate Principals Sign Here
Attest:

(Corporate Principal)

(Title)

(Business Address)

Surety Sign Here
Attest:

(Corporate Surety)
Witness:

(Business Address)

By _____ AFFIX

CORPORATE

Title _____ SEAL

The rate of premium on this Bond is _____ per thousand.

Total amount of premium charged is \$_____.

The above must be filled in by Corporate Surety. Power-of-Attorney of person signing for Surety company must be attached.

CERTIFICATE AS TO CORPORATE PRINCIPAL

I, _____, certify that I am the _____ Secretary of the corporation named as Principal in the within bond; that _____, who signed the said bond on behalf of the Principal was then _____ of said Corporation; that I know the signature and signature thereto is genuine; and that said Bond was duly signed, sealed and attested for and in behalf of said corporation by authority of its governing body.

DATE (SEAL)

LABOR AND MATERIALMEN'S BOND

KNOW ALL MEN BE THESE PRESENTS, that we _____

as principal, and _____

_____, as sureties are held and firmly bound unto the Westmoreland County Housing Authority, Pennsylvania, its certain attorneys, successors, or assigns (hereinafter called the Obligee) 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, personal representatives, successors, and assigns, jointly and severally, firmly by the presents:

WHEREAS, said principal has entered into a certain contract with said Obligee, dated _____, 20_____, (hereinafter called the Contract), for _____

which Contract and the Specifications for said work shall be deemed a part thereof as fully as if set out herein.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH THAT if said principal and all subcontractors to whom any portion of the work provided for in said Contract is sublet and all assignees of said principal and of such subcontractors shall promptly make payment for all material furnished, labor supplied or performed, rental for equipment employed, and services rendered by public utilities or in connection with the prosecution of the work, whether or not the said material, labor, equipment, or services entered into and become component parts of the work or improvement contemplated in said contract, or in any amendment or extension of or addition to said Contract, then the above obligation shall be void; otherwise to remain in full force and effect. PROVIDED, However that this bond is subject to the following conditions and limitations.

- (a) All persons who have performed labor, rendered services or furnished materials or machinery, shall have a direct right of action against the principal and surety on this Bond, which right of action shall be assorted in proceedings instituted in the state in which such labor performed, services rendered or materials furnished (or where labor has been performed, services rendered or materials furnished under said Contract in more than one State, then in any such State, insofar as permitted by the laws of such State, such right of action shall be asserted in a proceeding instituted in the name of the Obligee to the use and benefit of the person instituting such action and any or all other persons having claims hereunder, and any other person having a claim hereunder shall have the right to be made a party to such proceeding (but not later than one year after the complete performance of said

Contract and final settlement thereof) and to have such claim adjudicated in such action and judgment rendered thereon.

- (b) The surety shall not be liable hereunder for any damages or compensation recoverable under any workmen's compensation or employer liability statute.
- (c) In no event shall the surety be liable for a greater sum than the penalty of this bond, or subject to any suit, action or proceeding thereon that is instituted later than one year after the complete performance of said Contract and final settlement thereof.
- (d) As used herein: The Term "person" refers to any individual, firm or corporation who have furnished materials or machinery or public utility services to be used on or incorporated in the work or the prosecution thereof provided for in said Contract or in any amendment or extension of or addition to said Contract, and/or to any person engaged in the prosecution of the work provided for in said Contract or in any amendment or extension of or addition to said Contract, who is an agent, servant or employee of the principal, or of any subcontractor, or of any assignee of said principal or of any subcontractor and also anyone so engaged who performs the work of a laborer or of a mechanic, regardless of any contractual relationship between the principal, or any subcontractor, or any assignee of said principal or of said subcontractor, and such laborer or mechanic, but shall not include office employees not regularly stationed at the site of the work.

The said Surety, for the value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract, or to the work to be performed thereunder of the Specifications accompanying the same, shall in any wise affect its obligation on this Bond, and it does hereby waive notice of any such change, extension of time, alterations or addition to the terms of the Contract or to the work or the Specifications.

SIGNED, SEALED AND DELIVERED IN _____ ORIGINAL COUNTERPARTS this _____ day of _____, 20_____.

WITNESS:

Individual Principals Sign Here.

Title _____ (Seal)

Title _____ (Seal)

Title _____ (Seal)

Title _____ (Seal)

ATTEST:

Corporate Principal Sign Here:

BY _____

TITLE _____

BY _____

TITLE_____ (Seal)

Surety Sign Here:

BY _____

TITLE_____ (Seal)

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SECTION 00 0865
MAINTENANCE BOND

CONTRACT NO. _CONTRACT

BOND NO. _____

KNOW ALL BY THESE PRESENTS THAT we, the undersigned _____
_____ as PRINCIPAL, and _____
_____, a corporation organized and existing under the laws
of the state of _____, as SURETY, and just sum of _____
_____ DOLLARS _____ (\$
_____).

lawful money of the United States of America, to pay to the said _____ to
which payment well and truly be made and done, we bind ourselves, our heirs, executors,
administrators, successors, and assigns, jointly and severally, firmly by these presents.

WHEREAS, the above bounded Principal, entered into a Contract with the said _____
_____ dated this the _____ day of 20____, for the _____
_____ upon certain terms and conditions mentioned in the said Contract, a copy of which is
hereto attached, and made apart of hereof; 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 conditions 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 _____
_____ of 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.

Signed and sealed this _____ day of _____ 20xx.

(Principal Name) (Seal)

(Business Address)

(Witness)

By:

(Principle Title)

(Surety Name)

(Surety Business Address)

(Witness)

By: _____
(Attorney –
In - Fact)

DOCUMENT 00 0870
FORM OF CONTRACT

(3 PAGES)

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FORM OF CONTRACT

THIS AGREEMENT made this _____ day of _____, in the year Two Thousand and _____
by and between _____ a corporation organized and existing under laws of the State of _____
_____, a partnership consisting of _____, or individual trading as _____
_____, hereinafter called the "Contractor", and

THE WESTMORELAND COUNTY HOUSING AUTHORITY, hereinafter called the "WCHA",

WITNESSETH, That the Contractor and the WCHA for the consideration stated herein mutually agree as follows:

ARTICLE 1. Statement of Work. The Contractor shall furnish all labor, material, equipment and services, and perform and complete all work required for (the construction of) (description of work and project identification) in strict accordance with the Specifications for _____

(Identify the Specifications)

and Addenda thereto numbered _____ and _____, dated _____ and _____, and the Drawings referred to therein, all as prepared by _____, which said Specifications, Addenda and Drawings are incorporated herein by reference and made a part hereof.

ARTICLE 2. The Contract Price. The WCHA shall pay the Contractor for the performance of the Contract, in current funds, subject to additions and deductions as provided in the Specifications, the sum of _____ Dollars (\$_____).

ARTICLE 3. Contract Documents. The Contract shall consist of the following component parts:

- a. This Instrument
- b. General Conditions
- c. Special Conditions
- d. Technical Specifications
- e. Drawings

This instrument, together with the other documents enumerated in this Article 3, which said other documents are as fully a part of the Contract as if hereto attached or herein repeated, form the Contract. In the event that any provision in any component part of this Contract conflicts with any provision of any other component part, the provision of the component part first enumerated in this Article 3 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 Contract which each modifies.

FORM OF CONTRACT

IN WITNESS WHEREOF, the parties hereto have caused This Instrument to be executed in _____ original counterparts as of the day and year first above written.

(Contractor)

ATTEST:

By _____

Title _____

Business Address:

(Street)

(City) (Zip Code)

(WCHA)

By _____

Title _____

Business Address:

(Street)

(City) (Zip Code)

(Print or type the names underneath all signatures).

DOCUMENT 00 0880
WAGE DETERMINATION SCHEDULE

"General Decision Number: PA20240042 02/02/2024

Superseded General Decision Number: PA20230042

State: Pennsylvania

Construction Type: Residential

County: Westmoreland County in Pennsylvania.

RESIDENTIAL CONSTRUCTION PROJECTS (consisting of single family homes and 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 \$17.20 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 2024.
---	---

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 \$12.90 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 2024.
---	--

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the

R24-077-01 / WCHA New Stanton Manor Exterior Renovations

00 0880- 2

Wage Determination Schedule

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
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0	01/05/2024
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1	02/02/2024
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BRPA0009-043 12/01/2022

Rates	Fringes
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BRICKLAYER

Except. Rostraver Twp.....\$ 36.55	24.46
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Rostraver Twp.....\$ 37.00	23.82
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* CARP0142-005 06/01/2023

Rates	Fringes
-------	---------

CARPENTER.....\$ 32.29	15.27
------------------------	-------

ELEC0005-013 12/22/2023

Rates	Fringes
-------	---------

ELECTRICIAN.....\$ 28.90	18.56
--------------------------	-------

ENGI0066-025 06/01/2011

Rates	Fringes
-------	---------

POWER EQUIPMENT OPERATOR:

(Backhoe).....\$ 31.045	15.75
-------------------------	-------

PAIN0057-030 06/01/2014

Rates	Fringes
-------	---------

PAINTER: Brush and Roller.....\$ 17.67	11.48
--	-------

PLAS0526-007 06/01/2021

Rates	Fringes
-------	---------

CEMENT MASON/CONCRETE FINISHER...\$ 31.77 21.89

* SUPA2007-002 03/30/2007

	Rates	Fringes
Laborer, Unskilled.....	\$ 14.00 **	2.10
SHEET METAL WORKER.....	\$ 16.00 **	3.08

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

=====

** Workers in this classification may be entitled to a higher minimum wage under Executive Order 14026 (\$17.20) or 13658 (\$12.90). Please see the Note at the top of the wage determination for more information. Please also note that the minimum wage requirements of Executive Order 14026 are not currently being enforced as to any contract or subcontract to which the states of Texas, Louisiana, or Mississippi, including their agencies, are a party.

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 classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which 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. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of 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. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

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

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour National Office because National Office has responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write 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 the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request
R24-077-01 / WCHA New Stanton 00 0880- 6
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review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write 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 by 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

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION"

"General Decision Number: PA20240105 07/19/2024

Superseded General Decision Number: PA20230105

State: Pennsylvania

Construction Type: Building **(AT THE COMMUNITY BUILDING ONLY)**

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 \$17.20 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 2024.
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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 \$12.90 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 2024.
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The applicable Executive Order minimum wage rate will be
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Wage Determination Schedule

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	01/05/2024
1	01/12/2024
2	02/02/2024
3	06/07/2024
4	07/19/2024

ASBE0002-005 08/01/2023

Rates Fringes

ASBESTOS WORKER/HEAT & FROST INSULATOR

MECHANICAL- Duct, Pipe & Mechanical System Insulation and Industrial Work (Including Duct and Pipe).....	\$ 45.50	28.93
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BOIL0154-007 01/01/2023

Rates Fringes

BOILERMAKER.....	\$ 45.60	31.37
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BRPA0009-011 12/01/2022

Rates Fringes

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

BRPA0009-051 12/01/2022

Rates Fringes

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

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Wage Determination Schedule

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

CARP0142-013 06/01/2023

	Rates	Fringes
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

CARP0274-003 01/01/2024

	Rates	Fringes
PILEDRIVERMAN.....	\$ 40.63	21.92

CARP0443-004 06/01/2023

	Rates	Fringes
MILLWRIGHT.....	\$ 45.50	31.56%+9.01

ELEC0005-018 12/22/2023

	Rates	Fringes
ELECTRICIAN (Alarm Installation, Installation of Sound and Communication System and Low Voltage Wiring, HVAC/Temperature Controls Installation Only).....	\$ 48.61	30.91

* ENGI0066-040 06/12/2017

	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,		

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Mechanic, Paver (Asphalt, Aggregate, and Concrete), Scraper, Forklift (Lull)....\$ 34.49	20.15
Broom/Sweeper, Compressor, Concrete Pump, Highlift, Hoist, Pump, Roller, Tugboat, Forklift (ridden or self-propelled)..\$ 29.58	20.15
Loader.....\$ 34.49	20.15
Oiler.....\$ 27.25	20.15

*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
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IRONWORKER (Ornamental, Reinforcing, Rigger and Structural; Metal Buildings: Metal Siding/Wall Panels Installation).....\$ 38.89	34.54
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LABO0125-006 06/01/2022

Rates	Fringes
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LABORER Mason Tender - Cement/Concrete.....\$ 30.24	12.05
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* LABO0373-001 01/01/2024

Rates	Fringes
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LABORER (Asbestos Abatement (Removal from Floors, Walls, and Ceilings)).....\$ 26.97	19.39
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* LABO1451-001 01/01/2024

Rates	Fringes
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LABORER Mason Tender- Brick.....\$ 29.56	17.05
Common or General.....\$ 26.31	17.05

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Manor Exterior Renovations

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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 06/01/2017

	Rates	Fringes
PIPEFITTER (Industrial).....	\$ 37.88	22.90

PLUM0354-018 06/01/2017

	Rates	Fringes
PLUMBER.....	\$ 33.83	22.90

PLUM0354-019 06/01/2019

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Manor Exterior Renovations

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Wage Determination Schedule

	Rates	Fringes
PIPEFITTER (Includes HVAC Pipe Installation, Excludes Work on Industrial Sites).....	\$ 34.77	24.25

ROOF0037-005 06/01/2024

	Rates	Fringes
ROOFER (Excludes Metal Roof Installation and Waterproofing).....	\$ 38.00	20.67

SHEE0012-011 07/01/2022

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

* UAVG-PA-0032 01/01/2024

	Rates	Fringes
SPRINKLER FITTER (Fire Sprinklers).....	\$ 44.09	26.79

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
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Manor Exterior Renovations

Wage Determination Schedule

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 classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which 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. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of 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. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

State Adopted Rate Identifiers

Classifications listed under the ""SA"" identifier indicate that the prevailing wage rate set by a state (or local) government was 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.
01/03/2024 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:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour National Office because National Office has responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write 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 the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write 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 by 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
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Wage Determination Schedule

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

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION"

History

- **Jul 19, 2024**[PA20240105 - Modification 4](#)
- **Jul 19, 2024**[PA20240105 - Modification 3](#)
- **Jun 07, 2024**[PA20240105 - Modification 2](#)
- **Feb 02, 2024**[PA20240105 - Modification 1](#)
- **Jan 12, 2024**[PA20240105 - Modification 0](#)

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DOCUMENT 00 0884

MINIMUM WAGE NOTICE

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EMPLOYEE RIGHTS

UNDER THE DAVIS-BACON ACT

FOR LABORERS AND MECHANICS EMPLOYED ON FEDERAL OR FEDERALLY ASSISTED CONSTRUCTION PROJECTS

**PREVAILING
WAGES**

You must be paid not less than the wage rate listed in the Davis-Bacon Wage Decision posted with this Notice for the work you perform.

OVERTIME

You must be paid not less than one and one-half times your basic rate of pay for all hours worked over 40 in a work week. There are few exceptions.

ENFORCEMENT

Contract payments can be withheld to ensure workers receive wages and overtime pay due, and liquidated damages may apply if overtime pay requirements are not met. Davis-Bacon contract clauses allow contract termination and debarment of contractors from future federal contracts for up to three years. A contractor who falsifies certified payroll records or induces wage kickbacks may be subject to civil or criminal prosecution, fines and/or imprisonment.

APPRENTICES

Apprentice rates apply only to apprentices properly registered under approved Federal or State apprenticeship programs.

PROPER PAY

If you do not receive proper pay, or require further information on the applicable wages, contact the Contracting Officer listed below:

Westmoreland County Housing Authority
154 South Greengate Road
Greensburg, PA 15601
Michael L. Washowich

or contact the U.S. Department of Labor’s Wage and Hour Division.



WAGE AND HOUR DIVISION
UNITED STATES DEPARTMENT OF LABOR

1-866-487-9243
TTY: 1-877-889-5627
www.dol.gov/whd



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DOCUMENT 00 0886

SUPPLEMENTARY CONDITIONS OF THE CONTRACT
FOR CONSTRUCTION (form HUD-2554)

**Supplementary
Conditions of the
Contract for
Construction**
Section 232

**U.S. Department of Housing
and Urban Development**
Office of Residential
Care Facilities

OMB Approval No. 2502-0605
(exp. 06/30/2022)

Public reporting burden for this collection of information is estimated to average 0.5 hours. This includes the time for collecting, reviewing, and reporting the data. The information is being collected to obtain the supportive documentation which must be submitted to HUD for approval, and is necessary to ensure that viable projects are developed and maintained. The Department will use this information to determine if properties meet HUD requirements with respect to development, operation and/or asset management, as well as ensuring the continued marketability of the properties. This agency may not collect this information, and you are not required to complete this form, unless it displays a currently valid OMB control number.

Warning: Any person who knowingly presents a false, fictitious, or fraudulent statement or claim in a matter within the jurisdiction of the U.S. Department of Housing and Urban Development is subject to criminal penalties, civil liability, and administrative sanctions.

Article 1: Labor Standards

A. Applicability. The Project or program to which the construction work covered by this Contract pertains is being assisted or insured by the United States of America, and the following Federal Labor Standards Provisions are included in this Contract or related instrument pursuant to the provisions applicable to such Federal assistance or insurance. Any statute or regulation contained herein shall also include any subsequent amendment or successor statute or regulation.

B. Minimum Wages. Pursuant to Section 212 of the National Housing Act, as amended, 12 U.S.C. 1715c, the minimum wage provisions contained in this paragraph B do not apply to those projects with Security Instruments insured under Section 221(h)(1) designed for less than 9 families and they do not apply to those projects with Security Instruments insured under either Section 220 or 233 designed for less than 12 families.

1. (i) All laborers and mechanics employed or working upon the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the Project) shall 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 (40 U.S.C. 3141(2)(B)(ii)) 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 particular 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 on 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)(v)) 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.

(ii) (a) Any class of laborers or mechanics that is not listed in the wage determination and that is to be employed under this Contract shall be classified in conformance with the wage determination. HUD shall approve an additional classification and wage rate and fringe benefits only when the following criteria have been met:

- (1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
- (2) The classification is utilized in the area by the construction industry; and
- (3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(b) 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, U.S. Department of Labor, Washington, D.C. 20210 (“**Administrator**”). The Administrator, or an authorized representative, shall approve, modify, or disapprove every additional classification action within thirty (30) days of receipt and so advise HUD or its designee or shall notify HUD or its designee within the thirty (30) day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB control number 1215-0140.)

(c) 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 for determination. The Administrator, or an authorized representative, shall issue a determination within thirty (30) days of receipt and so advise HUD or its designee or shall notify HUD or its designee within the thirty (30) day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

(d) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs B.1.(ii)(b) or (c) of this Article, shall be paid to all workers performing work in the classification under this Contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the Contract for a class of laborers or mechanics includes a fringe benefit that 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.

(iv) 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. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

2. **Withholding.** 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 on the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 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, sponsor, applicant, or Owner, 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.

3. **Payrolls, records, and certifications.**

(i) 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 at the site of the work (or under the United States Housing Act of 1937, or under the Housing Act of 1949, 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 (40 U.S.C. 3141(2)(B)(ii))), 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 any costs reasonably anticipated in providing benefits under a plan or program described in Section 1 (b)(2)(B) of the Davis-Bacon Act (40 U.S.C. 3141(2)(B)(ii)), 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. (Approved by the Office of Management and Budget under OMB Control Numbers 1215-0140 and 1215-0017.)

(ii)(a) The Contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to HUD or its designee if the agency is a party to the Contract, but if the agency is not such a party, the Contractor shall submit the payrolls to the applicant, sponsor, or Owner, as the case may be, 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 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information must be submitted electronically. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to HUD or its designee if the agency is a party to the Contract, but if the agency is not such a party, the Contractor will submit the payrolls to the applicant sponsor, or Owner, as the case may be, for transmission to HUD or its designee, the Contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this subparagraph for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to HUD or its designee. (Approved by the Office of Management and Budget under OMB Control Number 1215-0149.)

(b) 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:

(1) That the payroll for the payroll period contains the information required to be provided under 29 CFR 5.5(a)(3)(ii), the appropriate information is being maintained under 29 CFR 5.5(a)(3)(i), and that such information is correct and complete.

(2) 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;

(3) 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.

(c) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by subparagraph B.3.(ii)(b) of this Article.

(d) 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 Sections 3801 *et seq.* of Title 31 of the United States Code.

(iii) The Contractor or subcontractor shall make the records required under subparagraph B.3.(i) of this Article available for inspection, copying, or transcription by authorized representatives of HUD or its designee 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, sponsor, applicant, or Owner, 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.

4. Apprentices and Trainees.

(i) **Apprentices.** Apprentices shall 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, or with a State Apprenticeship Agency recognized by such Office, or if a person is employed in his or her first ninety (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 the Office of Apprenticeship, 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 above, 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 the 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 journeymen 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 determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship, or a State Apprenticeship Agency recognized by such Office, withdraws approval of an apprenticeship program, the Contractor shall no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) **Trainees.** Except as provided in 29 CFR 5.16, trainees shall 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's 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 on 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 on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate that 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 on 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 on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the Contractor shall no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) **Equal employment opportunity.** The utilization of apprentices, trainees and journeymen under 29 CFR Part 5 shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

5. Compliance with Copeland Act Requirements. The Contractor shall comply with the requirements of 29 CFR Part 3, which are incorporated by reference in this Contract.

6. Subcontracts. The Contractor or subcontractor shall insert in any subcontracts the clauses set forth in subparagraphs 1 through 10 of this paragraph B and such other clauses as HUD or its designee may by appropriate instructions require, and a copy of the applicable prevailing wage determination, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all Contract clauses referenced in this subparagraph.

7. Contract termination and debarment. A breach of the Contract clauses in 29 CFR 5.5 may be grounds for termination of the Contract, and for debarment as a contractor or a subcontractor as provided in 29 CFR 5.12.

8. 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.

9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this Contract 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 HUD or its designee, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of Eligibility.

(i) 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 Government contracts by virtue of Section 3(a) of the Davis-Bacon Act (40 U.S.C. 3144(b)(2)) or 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

(ii) No part of this Contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of Section 3(a) of the Davis-Bacon Act (40 U.S.C. 3144(b)(2)) or 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 2424.

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001. Additionally, U.S. Criminal Code, 18 U.S.C. 1010, "Department of Housing and Urban Development and Federal Housing Administration transactions" provides in part: "Whoever, for the purpose of . . . influencing in any way the action of such Department . . . makes, passes, utters or publishes any statement, knowing the same to be false . . . shall be fined under this title or imprisoned not more than two years, or both."

C. Contract Work Hours and Safety Standards Act.

1. Applicability and Definitions. This paragraph C of Article 1 is applicable only if a direct form of federal assistance is involved, such as Section 8, Section 202/811 Capital

Advance, grants etc., and is applicable only where the prime contract is in an amount greater than \$100,000. As used in this paragraph C, the terms "laborers" and "mechanics" include watchmen and guards.

2. **Overtime requirements.** No contractor or subcontractor contracting for any part of the Contract work that may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty (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 forty (40) hours in such workweek.

3. **Violation; liability for unpaid wages; liquidated damages.** In the event of any violation of the immediately preceding subparagraph C.2, the Contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, the 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 such subparagraph, for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty (40) hours without payment of the overtime wages required by the clause set forth in such subparagraph.

4. **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 under any other Federal contract with the same prime contractor, or under 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 clause set forth in subparagraph 3 of this paragraph C.

5. **Subcontracts.** The Contractor or subcontractor shall insert in any subcontracts the clauses set forth in subparagraphs 1 through 5 of this paragraph C and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in such subparagraphs 1 through 5.

D. Certification.

For projects with Security Instruments insured under the National Housing Act, as amended, that are subject to paragraph B of this Article 1, the Contractor is required to execute the Contractor's Prevailing Wage Certificate within HUD-92448 as a condition precedent to insurance by HUD of the Loan, or an advance thereof, made or to be made by the Lender in connection with the construction of the Project.

Article 2: Equal Employment Opportunity

A. **Applicability.** This Article 2 applies to any contract for construction work, or modification thereof, as defined in the regulations of the Secretary of Labor at 41 CFR Chapter 60, which is paid for in whole or in part with funds obtained from the Federal Government or borrowed on the credit of the Federal Government pursuant to a grant, contract, loan, insurance, or guarantee, or undertaken pursuant to any Federal program involving such grant, contract, loan, insurance, or guarantee.

B. The Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, disability, or national origin. The Contractor 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 the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training including apprenticeship. 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 nondiscrimination clause.

C. The Contractor shall, in all solicitations or advertisements for employees placed by or on behalf of the Contractor state that all qualified applicants shall receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, disability, or national origin. The contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the contractor's legal duty to furnish information.

D. The Contractor shall send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding a notice to be provided advising the said labor union or workers representatives of the Contractor's commitments hereunder, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

E. The Contractor shall comply with all provisions of Executive Order 11246 of September 24, 1965, as amended, and of the rules, regulations, and relevant orders of the Secretary of Labor.

F. The Contractor shall furnish all information and reports required by Executive Order 11246, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and

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.

G. 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 Contractor may be declared ineligible for further government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246, or by rule, regulations or order of the Secretary of Labor, or as otherwise provided by law.

H. The Contractor shall include the provisions of paragraphs A through H of this Article 2 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, as amended, so that such provisions shall be binding upon each subcontractor or vendor. The Contractor shall take such action with respect to any subcontract or purchase order as HUD or the Secretary of Labor may direct as a means of enforcing such provisions, including sanctions for noncompliance. *Provided, however,* that in the event the Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by HUD or the Secretary of Labor, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

Article 3: Equal Opportunity for Businesses and Lower Income Persons Located Within the Project Area

A. This Article 3 is applicable to projects covered by Section 3, as defined in 24 CFR Part 135.

B. The work to be performed under this Contract is on a project assisted under a program providing direct Federal financial assistance from HUD and 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 requires that to the greatest extent feasible opportunities for training and employment be given to low- and very low-income persons who are (1) residents of the housing developments for which the assistance is expended, (2) residents of other developments managed by the public or Indian housing agency that is expending the assistance, (3) participants in YouthBuild programs, and (4) other low- and very low-income persons residing within the metropolitan area (or nonmetropolitan county) as determined by HUD in which the Project is located and contracts for work in connection with the Project be awarded to business concerns that provide economic opportunities for low- and very low-income persons.

Article 4: Health and Safety

A. This Article 4 is applicable only where the prime contract is in an amount greater than \$100,000.

B. No laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his or her health and safety as determined under construction safety and health standards promulgated by the Secretary of Labor by regulation.

C. The Contractor shall comply with all regulations issued by the Secretary of Labor pursuant to 29 CFR Part 1926, and failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act, 40 U.S.C 3701 *et seq.*

D. The Contractor shall include the provisions of this Article 4 in every subcontract so that such provisions shall be binding on each subcontractor. The Contractor shall take such action with respect to any subcontract as HUD or the Secretary of Labor shall direct as a means of enforcing such provisions.

DOCUMENT 00 9100

ADDENDA
(Sample)

PROJECT NO. _____

Project Name: _____

ADDENDUM NO. _____

DATE OF ISSUE: _____
PAGE NO. 1

Notice to All Bidders:

This addendum is hereby made a part of the contract and is to be included therein. The purpose of this addendum is to amend, modify and clarify the contract documents, as follows:

CHANGES TO PREVIOUS ADDENDUM:

CHANGES TO SPECIFICATIONS:

CHANGES TO DRAWINGS:

All bidders on this contract shall give due consideration to the contents of this addendum in the preparation of their Bid and shall so indicate on the Bid Form in the spaces provided. Failure of a bidder to acknowledge receipt of this addendum on his Bid form may be considered sufficient cause for rejection of his bid. It shall be the responsibility of each bidder to assure that all his suppliers and subcontractors are made aware of the contents of this addendum.

Architect:
Sleighter Design
1060 Eberly Way
Lemont Furnace, PA 15456

Owner:
Westmoreland County Housing Authority
167 South Greengate Road,
Greensburg, PA 15601

END OF ADDENDUM NO. _____

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SECTION 01 1000
SUMMARY

PART 1 GENERAL

1.01 PROJECT

- A. Project Name: New Stanton Manor Exterior Renovations
- B. Owner's Name: Westmoreland County Housing Authority.
- C. Architect's Name: Sleighter Design.

SUMMARY OF WORK:

The primary objective is to perform exterior renovations including cleaning and sealing the brick masonry, new balconies, install blanked off louvers at existing HVAC sleeves, building signage, new railings at entrance stairs and sidewalks, replace the roofing, gutters and downspouts, and storefront windows on the Community Building.

1.02 CONTRACT DESCRIPTION

- A. Contract Type: One prime contract, based on a Stipulated Base Bid Cost.
- B. Contracts will be awarded for these trades:
 - 1. General Construction
- C. The work of each trade is identified in the contract documents.

1.03 WORK BY OTHERS

- A. Items noted NIC (Not in Contract) are not a part of the Prime Contracts.

1.04 OWNER OCCUPANCY

- A. Owner intends to continue to occupy all of the spaces of the existing building during the entire construction period.
- B. Cooperate with Owner to minimize conflict and to facilitate Owner's operations.
- C. Schedule the Work to accommodate Owner occupancy.

1.05 CONTRACTOR USE OF SITE AND PREMISES

- A. Construction Operations: Limited to areas noted on Drawings.
- B. Arrange use of site and premises to allow:
 - 1. Owner occupancy.
 - 2. Use of site and premises by the public.
- C. Provide access to and from site as required by law and by Owner:
 - 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. Do not obstruct roadways, sidewalks, or other public ways without permit.

D. Time Restrictions:

1. Limit conduct of especially noisy exterior work to the hours of 8 am to 5 pm.

E. Utility Outages and Shutdown:

1. Limit disruption of utility services to hours the building is unoccupied.
2. Do not disrupt or shut down life safety systems, including but not limited to fire sprinklers and fire alarm system, without 7-days notice to Owner and authorities having jurisdiction.
3. Prevent accidental disruption of utility services to other facilities.

1.06 WORK SEQUENCE

- A. Coordinate construction schedule and operations with Owner and Architect.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

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**SECTION 01 1230
ALTERNATES**

PART 1 GENERAL

1.01. SECTION INCLUDES

- A. Description of Alternates.

1.02. RELATED REQUIREMENTS

- A. Document 00 2100 A701- Instructions to Bidders: Instructions for preparation of pricing for Alternates.
- B. Document 00 5200 A101-2017 – Standard Form of Agreement: Paragraph 4.2 Alternates; Incorporating monetary value of accepted Alternates.

1.03. ACCEPTANCE OF ALTERNATES

- A. Alternates quoted on Bid Forms will be reviewed and accepted or rejected at Owner's option. Accepted Alternates will be identified in the Owner-Contractor Agreement.
- B. Coordinate related work and modify surrounding work to integrate the Work of each Alternate.

1.04.SCHEDULE OF ALTERNATES

**DEDUCT ALTERNATE GC-1
BRICK REPOINTING**

(\$ _____)

State the amount to Deduct from the base bid, the amount for brick repointing as indicated on the drawings.

**DEDUCT ALTERNATE GC-2
BRICK REPLACEMENT**

(\$ _____)

State the amount to Deduct from the base bid, the amount for brick replacement as indicated on the drawings.

**DEDUCT ALTERNATE GC-3
BRICK SEALING**

(\$ _____)

State the amount to Deduct from the base bid, the amount for brick sealing as indicated on the drawings.

**DEDUCT ALTERNATE GC-4
ALUMINUM WINDOWS**

(\$ _____)

State the amount to Deduct from the base bid, the amount for thermal break double hung windows.

**DEDUCT ALTERNATE GC-5
GUTTERS AND DOWNSPOUTS**

(\$ _____)

State the amount to Deduct from the base bid, the amount for gutters and downspouts.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION 01 1230

**UNIT PRICES
SECTION 01 1270**

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

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

1.02 SECTION INCLUDES

- A. Administrative and procedural requirements for unit prices.

1.03 RELATED SECTIONS

- A. Section 00 0300 – Bid Form.
- B. Section 00 0700 General Conditions for Change Orders.

1.04 DEFINITIONS

- A. Unit Price: An amount proposed by Bidder and stated on the Bid Proposal as a price per unit of measurement for materials or services that will be added to or deducted from the Contract Sum by Change Order in the event the estimated quantities of Work required by the Contract Documents are increased or decreased.
 - 1. Unit prices quoted in the Bid Proposal are for additions or deletions of approved items of Work.
 - 2. All unit prices quoted shall be for the items completely installed, furnished, and operable in accordance with the Contract Documents, and shall include profit, overhead, taxes, cost of coordinating the unit price work with adjacent work, compensation for risk of loss or damage to the work regardless of cause, all expenses due to delays in performance, so they are the complete price to the Owner.
 - 3. Unit prices shall not apply to work the Contractor elects to do for its own convenience or to correct errors committed by the Contractor.
 - 4. All unit prices shall remain in effect for the full term of the Contract.
 - 5. Quantities listed in the Contract Documents are approximate only. Contract Amount shall be adjusted by change order using unit prices listed for actual quantities of Work performed.

1.05 PROCEDURES

- A. Measurement and Payment Procedures: As stated in General Conditions of the Contract. Refer to individual product Specification Sections for Work that requires establishment of unit prices. Basis of each unit price is specified in those Sections.
 - 1. Measure: Owner reserves the right to reject Contractor's measurement of work-in-place that involves use of established unit prices and to have this Work measured, at the Owner's expense, by an independent surveyor.
- B. List of Unit Prices: A list of unit prices is included at the end of this Section. Specification Sections referenced in the schedule contain requirements for materials described under each unit price.

PART 2 - PRODUCTS

Not Applicable to this Section.

PART 3 - EXECUTION

3.01 LIST OF UNIT PRICES

GC – 1 BRICK REPLACEMENT

(\$_____), for each brick.

The General Contractor is to provide 48 bricks for replacement as noted on the drawings in the base bid. To remove or add bricks to the contract, the contractor shall provide a unit cost per brick. This cost shall include all labor and materials.

GC – 2 BRICK REPOINTING

(\$_____), for each square foot (SF) of repointing.

The General Contractor is to provide one hundred and three (103) square feet of repointing as noted on the drawings, and an additional twenty (20) square feet of repointing in the base bid. To remove or add repointing to the contract, the contractor shall provide a unit cost per square foot. This cost shall include all labor and materials.

GC – 3 WALL SHEATHING

(\$_____), for each square foot (SF) of wall sheathing.

The General Contractor is to provide one hundred sixty(160) square feet of plywood wall sheathing to replace existing damaged or deleterious wall sheathing. To remove or to provide additional plywood sheathing, the contractor shall provide a unit cost per square foot. This cost shall include all labor and materials required for installation and demolition.

GC –4 WALL FRAMING

(\$_____), for each linear foot (LF) of wall framing

The General Contractor is to provide fifty (50) linear feet of exterior wall framing area to replace damaged, rotting, deleterious wall framing material in the base bid. The framing sizes are to match the existing framing. To remove from the contract or to provide additional framing to the contract, the contractor shall provide a unit cost per linear foot of framing that matches the sizes of the existing framing. This cost shall include all labor and materials required for installation and demolition.

GC –5 BATT INSULATION

(\$_____), for each square foot (SF) of batt insulation

The General Contractor is to provide one hundred forty (140) square feet of batt insulation to replace existing damaged or deleterious batt insulation. To remove from the contract or to provide additional insulation to the contract, the contractor shall provide a unit cost per square foot. This cost shall include all labor and materials required for installation and demolition.

GC –6 GYPSUM WALLBOARD

(\$ _____), for each square foot (SF) of gypsum wallboard

The General Contractor is to provide thirty two (32) square feet of gypsum wallboard to replace gypsum wallboard over damaged, rotting, deleterious wall framing material in the base bid. To remove from the contract or to provide additional gypsum wallboard to the contract, the contractor shall provide a unit cost per square foot. This cost shall include all labor and materials required for installation and demolition.

GC -7 ROOF SHEATHING

(\$ _____), for each square foot (SF) of roof sheathing

The General Contractor is to provide sixty four (64) square feet of plywood roof sheathing to replace existing damaged or deleterious roof sheathing. To remove or to provide additional plywood roof sheathing, the contractor shall provide a unit cost per square foot. This cost shall include all labor and materials required for installation and demolition.

GC -8 ROOF FRAMING

(\$ _____), for each linear foot (LF) of roof framing

The General Contractor is to provide sixty four (64) linear feet of roof framing to replace damaged, rotting, deleterious roof framing material in the base bid. The framing sizes are to match the existing framing. To remove from the contract or to provide additional roof framing to the contract, the contractor shall provide a unit cost per linear foot of roof framing that matches the sizes of the existing roof framing. This cost shall include all labor and materials required for installation and demolition.

GC -9 CONCRETE SIDEWALKS

(\$ _____), for each square foot (SF) of concrete sidewalks

The General Contractor is to provide concrete sidewalks as indicated on the drawings in the base bid. To remove from the contract or to provide additional concrete sidewalks to the contract, the contractor shall provide a unit cost per square foot of concrete sidewalks. This cost shall include all labor and materials required for installation and demolition.

END OF SECTION 01 1270

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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 SCHEDULE OF VALUES

- A. Form to be used: HUD-51000.
- B. Forms filled out by hand will not be accepted.
- C. Submit Schedule of Values in triplicate within 15 days after date of Owner-Contractor Agreement.

1.03 APPLICATIONS FOR PROGRESS PAYMENTS

- A. Payment Period: Monthly.
- B. Form to be used: HUD-51001.
- C. Forms filled out by hand will not be accepted.
- D. Execute certification by signature of authorized officer.
- E. 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.
- F. Submit three copies of each Application for Payment.
- G. Include the following with the application:
 - 1. Transmittal letter as specified for Submittals in Section 01 3000.
 - 2. Application for Payment (HUD-51001)
 - 3. Construction progress schedule, revised and current as specified in Section 01 3000.
 - 4. Schedule of Change Orders (HUD-51002)
 - 5. Schedule of Materials Stored (HUD-51003)
 - 6. Summary of Materials Stored (HUD-51004)
 - 7. Construction Progress Schedule (HUD-5372)
 - 8. Contractor Payment Certification (HUD-5370, clause 27e)
 - 9. Copy of approved Schedule of Values (HUD-51000)
 - 10. Copy of the previous Payment Application (first page only)
- H. Certified Payrolls - must be submitted on a weekly basis to the owner. Applications for payment will not be approved without all certified payrolls submitted.

1.04 MODIFICATION PROCEDURES

- A. For minor changes not involving an adjustment to the Contract Sum or Contract Time, Architect or Owner will issue instructions directly to Contractor.
- B. For other required changes, Architect will issue a document signed by Owner instructing Contractor to proceed with the change, for subsequent inclusion in a Change Order.
 - 1. The document will describe the required changes and will designate method of determining any change in Contract Sum or Contract Time.
 - 2. Promptly execute the change.
- C. For changes for which advance pricing is desired, Architect will issue a document that includes a detailed description of a proposed change with supplementary or revised drawings and specifications, a change in Contract Time for executing the change with a stipulation of any overtime work required and the period of time during which the requested price will be considered valid. Contractor shall prepare and submit a fixed price quotation within two days.
- D. Contractor may propose a change by submitting a request for change to Architect, describing the proposed change and its full effect on the Work, with a statement describing the reason for the change, and the effect on the Contract Sum and Contract Time with full documentation and

a statement describing the effect on Work by separate or other contractors. Document any requested substitutions in accordance with Section 01 6000.

- E. Computation of Change in Contract Amount: As specified in the Agreement and Conditions of the Contract.
 - 1. For change requested by Architect for work falling under a fixed price contract, the amount will be based on Contractor's price quotation as approved by the Architect.
 - 2. For change requested by Contractor, the amount will be based on the Contractor's request for a Change Order as approved by Architect.
 - 3. For pre-determined unit prices and quantities, the amount will be based on the fixed unit prices.
 - 4. For change ordered by Architect without a quotation from Contractor, the amount will be determined by Architect based on the Contractor's substantiation of costs as specified for Time and Material work.
- F. Substantiation of Costs: Provide full information required for evaluation.
 - 1. Provide the following data:
 - a. Quantities of products, labor, and equipment.
 - b. Taxes, insurance, and bonds.
 - c. Overhead and profit.
 - d. Justification for any change in Contract Time.
 - e. Credit for deletions from Contract, similarly documented.
 - 2. Support each claim for additional costs with additional information:
 - a. Origin and date of claim.
 - b. Dates and times work was performed, and by whom.
 - c. Time records and wage rates paid.
 - d. Invoices and receipts for products, equipment, and subcontracts, similarly documented.
 - 3. For Time and Material work, submit itemized account and supporting data after completion of change, within time limits indicated in the Conditions of the Contract.
 - a. The Owner or Engineer shall verify all Time and Materials used on a daily basis.
- G. Execution of Change Orders: Architect will issue Change Orders for signatures of parties as provided in the Conditions of the Contract.
- H. Promptly revise progress schedules to reflect any change in Contract Time, revise sub-schedules to adjust times for other items of work affected by the change, and resubmit.
- I. Promptly enter changes in Project Record Documents.

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. Release of Certification of Final Payment.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 01 3000
ADMINISTRATIVE REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Preconstruction meeting.
- B. Progress meetings.
- C. Construction progress schedule.
- D. Progress photographs.
- E. Coordination drawings.
- F. Submittals for review, information, and project closeout.

1.02 RELATED REQUIREMENTS

- A. Section 01 3216 - Construction Progress Schedule: Form, content, and administration of schedules.
- B. Section 01 3300 - Submittals
- C. Section 01 7000 - Execution and Closeout Requirements: Additional coordination requirements.
- D. Section 01 7800 - Closeout Submittals: Project record documents.

1.03 PROJECT COORDINATION

- A. Cooperate with the Owner in allocation of mobilization areas of site; for field offices and sheds, for storage areas, access, traffic, and parking facilities.
- B. During construction, coordinate use of site and facilities through the Owner.
- C. Comply with Owner and Architect's procedures for intra-project communications; submittals, reports and records, schedules, coordination drawings, and recommendations; and resolution of ambiguities and conflicts.
- D. Comply with instructions of the Owner for use of temporary utilities and construction facilities.
- E. Coordinate field engineering and layout work under instructions of the Architect.
- F. Make the following types of submittals to Architect:
 - 1. Requests for interpretation.
 - 2. Requests for substitution.
 - 3. Shop drawings, product data, and samples.
 - 4. Test and inspection reports.
 - 5. Design data.
 - 6. Manufacturer's instructions and field reports.
 - 7. Applications for payment and change order requests.
 - 8. Progress schedules.
 - 9. Coordination drawings.
 - 10. Correction Punch List and Final Correction Punch List for Substantial Completion.
 - 11. Closeout submittals.

1.04 ADMINISTRATIVE AND SUPERVISORY PERSONNEL

- A. General: In addition to its full-time on site Project Superintendent, each Prime Contractor shall provide other administrative and supervisory personnel, as required for proper performance of the work. Include special personnel required for coordination of operations with other Prime Contractors.
- B. Project Coordinator: The Contractor for General Construction shall provide a fulltime Superintendent/Project Coordinator, experienced in administration and supervision of building construction, including plumbing, mechanical, and electrical work. The Superintendent/Project

Coordinator shall be authorized to act as the coordinator of construction activities between the separate Prime Contractors.

1. Construction activities requiring coordination by the Project Coordinator include, but are not limited to, the following:
 - a. Scheduling and sequencing the Work.
 - b. Sharing access to work spaces.
 - c. Installations.
 - d. Protection of each other's work.
 - e. Cutting and patching.
 - f. Selections for compatibility.
 - g. Coordination drawings.
 - h. Inspections and tests.
 - i. Temporary services and facilities.
 - j. Daily project clean up activities.
 - k. Quality Control.
- C. Staff Names: Within 5 calendar days of commencement of construction operations, each Prime Contractor shall submit a list of its principal staff assignments, including the Superintendent and other personnel in attendance at the Project Site. Identify individuals and their duties and responsibilities. List their addresses and telephone numbers.

1.05 CONTRACTOR COORDINATION

- A. The General Contractor is designated as the Lead Prime Contractor for the Project. Each Prime Contractor shall coordinate its construction activities with those of the other prime contractors and other entities involved to assure efficient and orderly installation of each part of the work. Each Prime Contractor shall coordinate its operations with operations included under different Sections of the Specifications that depend on each other for proper installation, connection, and operation.
- B. Each Prime Contractor shall schedule its construction operations in the sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
- C. Where availability of space is limited, each Prime Contractor shall coordinate installation of different components with other prime contractors to assure maximum accessibility for required maintenance, service, and repair.
- D. Each Prime Contractor shall make adequate provisions to accommodate items scheduled for later installation.
- E. Each Prime Contractor shall participate in these coordination requirements. Each Prime Contractor shall advise the Owner and Engineer of overall coordination progress. When necessary, such as in congested spaces where multiple prime contracts are involved, the prime contractors shall meet with the Owner and Engineer and all other prime contractors involved to resolve critical coordination areas. Specific responsibilities are assigned to each prime contractor. The General Contractor and other Prime Contractors shall prepare Coordination Drawings as necessary to verify conflicts prior to installation.
- F. In the event of coordination disputes or questions, the prime contractors involved shall submit the question or dispute to the engineer. The engineer will provide specific direction relating to the question or dispute. Direction provided to prime contractors in response to questions or disputes shall be adhered to by all prime contractors. The Owner will not consider requests for additional time or coordination, questions, or disputes. In all matters pertaining to coordination, the decision of the engineer shall be final.
- G. Where necessary, prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and attendance at meetings.
 1. Prepare similar memoranda for the Owner and separate contractors where coordination of their Work is required.

- H. Administrative Procedures: Each Prime Contractor shall coordinate scheduling and timing of its required administrative procedures with other construction activities and activities of other prime contractors to avoid conflicts and assure orderly progress of the work. Such administrative activities include, but are not limited to, the following:
1. Preparation of schedules.
 2. Installation and removal of temporary facilities.
 3. Delivery and processing of submittals.
 4. Progress meetings.
 5. Project closeout activities.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 PRECONSTRUCTION MEETING

- A. Owner will schedule a meeting after Notice of Award.
- B. Attendance Required:
1. Owner.
 2. Architect.
 3. Prime Contractors.
- C. Agenda:
1. Execution of Owner-Contractor Agreement.
 2. Submission of executed bonds and insurance certificates.
 3. Distribution of Contract Documents.
 4. Submission of list of Subcontractors, Schedule of Values, and Progress Schedule.
 5. Designation of personnel representing the parties to Contract, Owner and Architect.
 6. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, Change Orders, and Contract closeout procedures.
 7. Scheduling.
- D. Owner will record minutes and distribute copies within five days after meeting to participants, with copies to Architect, Owner, Contractors, and those affected by decisions made.

3.02 SITE MOBILIZATION MEETING

- A. Schedule meeting at the Project site prior to Contractor occupancy.
- B. Attendance Required:
1. Contractor.
 2. Owner.
 3. Architect.
 4. Contractor's Superintendent.
 5. Major Subcontractors.
- C. Agenda:
1. Use of premises by Owner and Contractor.
 2. Owner's requirements and occupancy prior to completion.
 3. Construction facilities and controls provided by Owner.
 4. Security and housekeeping procedures.
 5. Schedules.
- D. Record minutes and distribute copies within two days after meeting to participants, with two copies to Architect, Owner, participants, and those affected by decisions made.

3.03 PROGRESS MEETINGS

- A. Owner will make arrangements for meetings, prepare agenda with copies for participants, preside at meetings.
- B. Attendance Required:
1. Contractor.

2. Owner.
 3. Architect.
 4. Special Consultants.
 5. Contractor's Superintendent.
 6. Major Subcontractors.
- C. 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 off-site fabrication and delivery schedules.
 7. Maintenance of progress schedule.
 8. Corrective measures to regain projected schedules.
 9. Planned progress during succeeding work period.
 10. Coordination of projected progress.
 11. Maintenance of quality and work standards.
 12. Effect of proposed changes on progress schedule and coordination.
 13. Other business relating to Work.
- D. Contractors shall provide a written report on past weeks work at each job conference.
- E. Contractors shall provide a written report on projected work for the next week at each job conference.
- F. Owner will record minutes and distribute copies within two days after meeting to participants, with copies to Architect, Owner, Contractors, and those affected by decisions made.

3.04 CONSTRUCTION PROGRESS SCHEDULE - SEE SECTION 01 3216

3.05 PROGRESS PHOTOGRAPHS

- A. Submit new photographs at least once a month, within 3 days after exposure.
- B. Photography Type: Digital; electronic files.
- C. Provide photographs of site and construction throughout progress of Work produced by an experienced photographer, acceptable to Architect.
- D. In addition to periodic, recurring views, take photographs of each of the following events:
 1. Completion of site clearing.
 2. Excavations in progress.
 3. Foundations in progress and upon completion.
 4. Structural framing in progress and upon completion.
 5. Final completion, minimum of ten (10) photos.
- E. Views:
 1. Provide non-aerial photographs from four cardinal views at each specified time, until Date of Substantial Completion.
 2. Consult with Architect for instructions on views required.
 3. Provide factual presentation.
 4. Provide correct exposure and focus, high resolution and sharpness, maximum depth of field, and minimum distortion.
 5. Point of View Sketch: Provide sketch identifying point of view of each photograph.
- F. 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 email.
 2. File Naming: Include project identification, date and time of view, and view identification.
 3. Point of View Sketch: Include digital copy of point of view sketch with each electronic submittal; include point of view identification in each photo file name.

4. 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.

3.06 COORDINATION DRAWINGS

- A. Provide information required by Architect for preparation of coordination drawings.
- B. Review drawings prior to submission to Architect.
- C. Provide input from all Prime Contractor involved.
- D. The General Contractor shall coordinate their work to ensure that the project progresses without interruption. Conflicts of equipment shall be resolved prior to installation, and the required clear equipment working spaces shall be maintained (and applicable building codes shall be met). The engineer shall be notified immediately of any discrepancies.

3.07 SUBMITTALS FOR REVIEW - REFER TO SECTION 01 3300 SUBMITTALS

END OF SECTION

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SUBMITTAL COVER SHEET

(Attach to each copy of each submittal)

PROJECT NAME & NUMBER: _____

ENGINEER: Sleighter Design

1060 Eberly Way, Lemont Furnace, PA 15456

Phone: 724.438.4010 Fax: 724.438.4017

PRIME CONTRACTOR _____

SUBCONTRACTOR/SUPPLIER _____

MANUFACTURER _____

ITEM SUBMITTED _____ SUBMITTAL NO. _____

SPECIFICATION SECTION NO. _____ PARAGRAPH NO. _____

DRAWING REFERENCE _____ DETAIL NO. _____

CERTIFICATION: (Circle One)

A. Specified Items - Certified to comply with Drawings and Specifications.

Contractor must provide the following:

1. Product data for specified item.

B. Alternate Items - Certified to comply with Drawings and Specifications exceed as noted on submittal deviation sheet. Contractor must provide the following:

1. Submittal Deviation Sheet.

2. Product Data for Alternate Item.

3. Product Data for Specified Item.

Subcontractor / Supplier

Prime Contractor

Signature: _____ Signature: _____

Date: _____ Date: _____

SUBMITTAL DEVIATION SHEET

(Attach to each copy of each submittal)

PROJECT NAME & NUMBER: _____

ENGINEER: Sleighter Design
1060 Eberly Way, Lemont Furnace, PA 15456
Phone: 724.438.4010 Fax: 724.438.4017

PRIME CONTRACTOR: _____

SUBCONTRACTOR/SUPPLIER: _____

PRODUCT SPECIFIED: _____

SPECIFICATION SECTION NO. _____ PARAGRAPH NO. _____

DRAWING REFERENCE _____ DETAIL NO. _____

DESCRIPTION OF DEVIATION:

Subcontractor / Supplier

Prime Contractor

Signature: _____ Signature: _____

Date: _____ Date: _____

ENGINEER REMARKS:

SECTION 01 3213
SCHEDULING AND PHASING

PART 1 GENERAL

1.01 SUBSTANTIAL COMPLETION

- A. Total time for **Substantial Completion** of the contract is **166 calendar days** from the written notice to proceed.
- B. Substantial Completion is the stage in the progress of the Work when the Work is sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work for its intended use. The intended use of this project is delivering apartments ready for occupancy and rent by the owner.

1.02 FINAL COMPLETION

- A. Total time for Final Completion of the contract is **180 calendar days** from the written notice to proceed.
- B. Final Completion is the stage when all Work is complete in accordance with the Contract Documents, the owner and architect have accepted the Work, and all Closeout documents have been completed and accepted by the owner.

1.03 LIQUIDATED DAMAGES

- A. The damages incurred by the Owner due to the Contractor's failure to complete the Work, or portions thereof, designated in the Contract Documents, including any extensions thereof under the Contract Documents, shall be in the amount set forth below for each consecutive calendar day beyond each Specific Date (Sunday and all holidays included) for which the Contractor shall fail to complete the Work or designated portion thereof designated in this section.
- B. The amount of liquidated damages provided in the Contract Documents shall not be considered a penalty and shall compensate the Owner only for the Owner's inability to use or otherwise have available, the Project or any portion thereof for its intended purpose by the Dates set forth in the Contract Documents.
- C. If, during the course of the Contractor's performance of the Work, the Contractor shall fail to complete the Work, or portions thereof, in accordance with Specific Dates or the Contract Time, the Owner may retain the estimated amount of liquidated damages for which the Contractor shall be liable to the Owner under the Contract Documents, from amounts which become payable or are otherwise certified as payable to the Contractor under the Contract Documents.
- D. In the event that the Work must be conducted beyond the normal working hours specified or if the Project is not completed within the specified duration, the Contractors shall reimburse the Consultants (A/E, etc.) for all of their expenses. Expenses shall be calculated at the cost times 2.75 on labor, and costs times 1.15 on all other items.
- E. Liquidated Damages will be assessed as follows:
 - 1. Substantial Completion = **\$250.00 per day** for each day the project is not substantially complete beyond the date established for Substantial Completion.
 - 2. Final Completion = **\$250.00 per day** for each day the project is not at Final Completion beyond the date established for Final Completion.
 - 3. If the project is not Substantially complete and Final completion is not achieved in the specified times, then both liquidated damage costs shall apply simultaneously.
 - 4. If the owner incurs additional damages as a result of the project not being either Substantially Complete or achieving Final Completion within the required dates, the Contractor shall also be liable for these costs.

1.04 SCHEDULING

- A. The General Contractor must provide a detailed project schedule indicating all the work activities in accordance with Section 01 3216.
- B. The schedule must be reviewed and approved by the owner and engineer prior to beginning construction.

1.05 WEATHER DELAYS

- A. Contractors shall expect and incorporate into the schedule delays due to weather.
- B. In extreme cases, such as natural disasters, weather delays may be accepted as justification for a contract time extension, however time extensions will not be accepted for normal weather conditions.

1.06 WORK HOURS

- A. Contractors shall include all necessary overtime, weekend, holiday, and second and/or third shift work to complete the project within the specified project duration.
- B. No extension of contract length or contract cost will be allowed for contractors to work additional hours.

PART 2 PRODUCTS – NOT USED

PART 3 EXECUTION – NOT USED

END OF SECTION

SECTION 01 3216
CONSTRUCTION PROGRESS SCHEDULE

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Preliminary schedule.
- B. Construction progress schedule, with network analysis diagrams and reports.

1.02 RELATED SECTIONS

- A. Section 01 1000 - Summary: Work sequence.
- B. Section 01 3213 - Scheduling and Phasing

1.03 SCHEDULE COORDINATION

- A. The General Contractor shall establish the overall schedule.
- B. The General Contractor is responsible for maintenance and updates to the schedule throughout the project.

1.04 SUBMITTALS

- A. Within 5 days after date of Agreement, submit preliminary schedule to the Engineer for review.
- B. If preliminary schedule requires revision after review, submit revised schedule within 5 days.
- C. Within 5 days after review of preliminary schedule, submit draft of proposed complete schedule for review.
- D. Within 5 days after joint review, submit complete schedule.
- E. Submit updated schedule with each Application for Payment, or as requested by the Owner or Engineer.
- F. Submit under transmittal letter form specified in Section 01 3000 - Administrative Requirements.

1.05 QUALITY ASSURANCE

- A. Contractor's Administrative Personnel: 5 years minimum experience in using and monitoring CPM schedules on comparable projects.

1.06 SCHEDULE FORMAT

- A. Listings: In chronological order according to the start date for each activity. Identify each activity with the applicable specification section number.
- B. Scale and Spacing: To allow for notations and revisions.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 PRELIMINARY SCHEDULE

- A. Prepare preliminary schedule in the form of a preliminary network diagram.

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. Identify work of separate stages and other logically grouped activities.
- D. Show accumulated percentage of completion of each item, and total percentage of Work completed, as of the first day of each month.
- E. Provide separate schedule of submittal dates for shop drawings, product data, and samples, owner-furnished products, and dates reviewed submittals will be required from Architect. Indicate decision dates for selection of finishes.

- F. Provide legend for symbols and abbreviations used.

3.03 NETWORK ANALYSIS

- A. Prepare network analysis diagrams and supporting mathematical analyses using the Critical Path Method.
- B. Illustrate order and interdependence of activities and sequence of work; how start of a given activity depends on completion of preceding activities, and how completion of the activity may restrain start of subsequent activities.
- C. Mathematical Analysis: Tabulate each activity of detailed network diagrams, using calendar dates, and identify for each activity:
 - 1. Preceding and following event numbers.
 - 2. Activity description.
 - 3. Estimated duration of activity, in maximum 15 day intervals.
 - 4. Earliest start date.
 - 5. Earliest finish date.
 - 6. Actual start date.
 - 7. Actual finish date.
 - 8. Latest start date.
 - 9. Latest finish date.
 - 10. Total and free float; float time shall accrue to Owner and to Owner's benefit.
 - 11. Monetary value of activity, keyed to Schedule of Values.
 - 12. Percentage of activity completed.
 - 13. Responsibility.
- D. Analysis Program: Capable of compiling monetary value of completed and partially completed activities, accepting revised completion dates, and recomputation of all dates and float.
- E. Required Reports: List activities in sorts or groups:
 - 1. By preceding work item or event number from lowest to highest.
 - 2. By amount of float, then in order of early start.
 - 3. Listing of activities on the critical path.

3.04 REVIEW AND EVALUATION OF SCHEDULE

- A. Participate in joint review and evaluation of schedule with Architect 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 5 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. Update 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 Final 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 including the effects of changes on schedules of separate contractors.

3.06 DISTRIBUTION OF SCHEDULE

- A. Distribute copies of updated schedules to Contractor's project site file, to subcontractors, suppliers, Architect, Owner, and other concerned parties.

- B. Instruct recipients to promptly report, in writing, problems anticipated by projections shown in schedules.

END OF SECTION

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SECTION 01 3300
SUBMITTALS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Project Submittal Log.
- B. Approval of Manufacturers, Suppliers and subcontractors.
- C. Approval of Samples.
- D. Approval of Shop Drawings.
- E. Substitutions.

1.02 PROJECT SUBMITTAL LOG

- A. The Contractor shall furnish to the Engineer, within thirty (30) days after the contract award date, one (1) copy of a Project Submittal Log, in chart form. The Project Submittal Log form shall be coordinated with the construction schedule to prevent any delays. The schedule shall prioritize materials and take into account manufacturing lead times. Failure to submit and maintain the submittal schedule must be identified in writing to the Owner/Engineer and may result in holding payment to the Contractor.
 - 1. The Project Submittal Log shall be comprehensive to include, but not be limited to, the following types of submittals:
 - a. Shop Drawings
 - b. Catalog Data
 - c. Samples
 - d. Schedules
 - e. Charts
 - f. Equipment Lists
 - g. Mock-Up Panels
 - h. Tests and Test Reports
 - i. Local, State, and Federal Agency Permits
 - j. Local, State, and Federal Agency Approvals
 - k. Independent Agency Reports and Approvals
 - l. Miscellaneous Items
 - m. Operating and Maintenance Instructions
 - n. Certificates
 - o. Warranties and Guarantees
 - p. Project Record Documents
 - q. Final Documents
 - r. Owner's Manual
 - s. Certification Forms
 - t. Applications for Payments
 - u. Performance Bonds
 - v. Payment Bonds
 - 2. The Project Submittal Log shall include, but not limited to, the following chart columns:
 - a. Specification Number
 - b. Description
 - c. Number of copies
 - d. To A/E
 - e. Date from A/E
 - f. Date to Contractor
 - g. Actions Taken
 - h. Remarks

1.03 APPROVAL OF MANUFACTURERS, SUPPLIERS AND SUB- CONTRACTORS

- A. Submit for approval within ten (10) days after the contract award, on the Contractor's letterhead, a complete list of manufacturers, suppliers and sub-contractors for all major items of material, equipment, or systems to be used, including complete and accurate name, address and telephone numbers.

1.04 SUBMITTAL PROCEDURES

- A. Each submittal shall include a single item or element of construction. A Submittal Cover Sheet, on attached form, shall be completed, signed and certified by the Contractor for EACH submittal. The Engineer will not accept submittals including multiple items or elements of construction. Submittals not meeting this procedure requirement may be returned with No Action Taken. No extension of Contract Time will be authorized due to failure to comply with this procedure.
- B. Coordination: Coordinate preparation and processing of submittals with performance of construction activities. Transmit each submittal sufficiently in advance of performance of related construction activities to avoid delays.
 - 1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
 - 2. Coordinate transmittal of different types of submittal for related elements of the work so processing will not be delayed by the need to review submittals concurrently for coordination.
 - a. The Engineer reserves the right to withhold action on a submittal requiring coordination with other submittals until all related submittals are received.
 - b. Be advised that all interior finishes will be reviewed together and finally determined after receipt of all shop drawings, product data and samples which pertain to the interior finish color selections and related equipment.
 - c. Be advised that all exterior finishes and site elements will be reviewed together and finally determined after receipt of all shop drawings, product data and samples which pertain to the exterior finish color selections and related equipment.
 - 3. Processing: To avoid the need to delay installation as a result of the time required to process submittals, allow sufficient time for submittal review, including time for submittals.
 - a. Allow a minimum of thirty (30) working days for review. Addition time may be required for further review and/or coordination with consultants and subsequent submittals as determined by Engineer.
 - b. If a resubmittal is necessary, process the same as the original submittal.
 - c. No extension of Contract Time will be authorized because of failure to transmit submittals to Engineer sufficiently in advance of Work to permit processing.
- C. Submittal Preparation: The Engineer will not accept submittals received without the attached Submittal Cover Sheet. The Contractor shall stamp the Submittal Cover Sheet with a uniform action stamp. The Contractor shall mark the stamp appropriately to indicate the action taken. Submittal shall be pre-reviewed by the Contractor PRIOR to submittal to Engineer for review.
 - 1. Use the Submittal Cover Sheet attached at the end of this Section for all submittals.
 - 2. Complete all information required on Submittal Cover Sheet failure to do so may result in return of the submittal with No Action Taken. No extension of Contract Time will be authorized because of failure to comply with this procedure.
 - 3. Contractor's Transmittal: The Engineer will not accept submittals received from sources other than the Contractor.
 - 4. Contractors shall provide all submittals electronically in PDF format.
 - 5. Following approval of submittals, the Contractor shall provide hard copies of the approved submittals to the owner.

1.05 SUBMITTALS

- A. SHOP DRAWINGS
 - 1. Submit newly prepared information drawn accurately and to scale. Highlight, encircle, or otherwise indicate deviations from the Contract Documents or copy standard information

as the basis of Shop Drawings. Standard information prepared without specific reference to the Project is not a Shop Drawing.

2. Shop Drawings include fabrication and installation drawings, setting diagrams, schedules, patterns, templates and similar drawings. Include the following information:
 - a. Dimensions.
 - b. Identification of products and materials included by sheet and detail number.
 - c. Notation of dimensions established by field measurement.
 - d. Sheet Size: Except for templates, patterns and similar full-size Drawings, submit Shop Drawings on sheets at least 8 ½ by 11 inches but no larger than 30 by 42 inches.
 - e. Maintain a complete set of shop drawings on site during construction.
 - f. Maintain a set of marked up Shop drawings as part of the project record documents to be turned over to the Owner at Contract Closeout.
 - g. Do not use Shop Drawings without an appropriate final stamp indicating action taken.

B. PRODUCT DATA

1. Collect Product Data into a single submittal for each element of construction or system. Product Data includes printed information, such as manufacturers installation instructions, catalog cuts, standard color charts, roughing-in diagrams and templates, standard wiring diagrams. And performance curves.
2. Mark each copy to show applicable choices and options. Where printed Product Data includes information on several products that are not required, mark copies to indicate the applicable information. Include the following information:
 - a. Manufacturer's printed recommendations.
 - b. Compliance with trade association standards.
 - c. Compliance with recognized testing agency standards.
 - d. Application of testing agency labels and seals.
 - e. Notation of dimensions verified by field measurement.
 - f. Notation of coordination requirements.
 - g. Maintain a complete set of Product Data on site during construction.
 - h. Maintain a set of marked up Product Data as part of project record documents to be turned over to Owner at Contract Closeout.
 - i. Do not use Product Data without an appropriate final stamp indicating action taken.

C. Action Stamp: The Contractor will stamp each sheet of Submittal with a uniform, action stamp. The Contractor shall mark the stamp appropriately to indicate the action taken.

D. Distribution: Furnish copies of final approved Submittal to installers, subcontractors, suppliers, manufacturers, fabricators, and all others required for performance of construction activities.

E. All required shop drawings and catalog data must be submitted within 30 days of the first official job meeting.

1.06 SAMPLES

A. Where required by individual specification sections, submit full-sized, fully fabricate Samples cured and finished as specified and physically identical with the material or product proposed. Samples include partial sections of manufactured or fabricated components, cuts or containers of materials, color range sets, and swatches showing color, texture, and pattern.

1. Mount or display Samples in the manner to facilitate review of qualities indicated. Prepare Samples to match the Engineer's sample. Include the following:
 - a. Specifications Section number and reference.
 - b. Generic description of the Sample.
 - c. Sample source.
 - d. Product name or name of manufacturer.
 - e. Compliance with recognized standards.
 - f. Availability and delivery time.
 - g. Submit Samples for review of size, kind, color, pattern, and texture. Submit Samples for a final check of these characteristics with other elements and a comparison of

these characteristics between the final submittal and the actual component as delivered and installed.

- 1) Where variation in color, pattern, texture, or other characteristic is inherent in the material or product represented, submit at least 3 multiple units that show approximate limits of the variation.
 - 2) Refer to other Specification Sections for requirements for Samples that illustrate workmanship, fabrication techniques, details of assembly, connections, operation, and similar construction characteristics.
 - 3) Samples not incorporated into the Work, or otherwise designated as the Owner's property, are the property of the Contractor and shall be removed from the site prior to Substantial completion.
- h. Submittal: Submit a full set of choices where Samples are submitted for selection of color, pattern, texture, or similar characteristics from a range of standard choices.
- i. The Engineer will review and return preliminary submittals with the Engineer's notation, indicating selection and other action.
- 1) Refer to Submittals Procedures for coordination of sample Submittals.

1.07 ENGINEER'S ACTION

- A. Except for submittal for record or information, where action and return is required, the Engineer will review each submittal, mark to indicate action taken, and return promptly.
1. Compliance with specified characteristics is the Contractor's responsibility.
- B. Action Stamp: The Engineer will stamp each submittal with a uniform, action stamp. The Engineer will mark the stamp to indicate the action taken, as follows:
1. "NO EXCEPTION TAKEN": The Work covered by the submittal may proceed without further submittal provided it complies with requirements of the Contract Documents. Final payment depends on that compliance.
 2. REJECTED": Do not proceed with Work covered by the submittal, including purchasing, fabrication, delivery or other activity. Do not resubmit a revised copy; prepare a new submittal according to the notations; resubmit without delay. Repeat if necessary to obtain different action
 3. "SUBMIT SPECIFIED ITEM": Do not proceed with Work covered by the submittal, including purchasing, fabrication, delivery or other activity. Prepare a new submittal indicating specified material; resubmit without delay.
 4. "MAKE CORRECTIONS NOTED": Contractor shall address all notations and proceed with work provided it complies with the Contract Documents. Final payment depends on that compliance.
 5. "REVISE AND RESUBMIT": Do not proceed with Work covered by the submittal, including purchasing, fabrication, delivery or other activity. Revise or prepare a new submittal according to the notations; resubmit without delay. Repeat if necessary to obtain different action mark.
 6. "RESUBMISSION NOT REQUIRED": The Work covered by the submittal may proceed provide it complies with notations or corrections on the submittal and requirements of the Contract Documents. Final payment depends on that compliance.
- C. Unsolicited Submittals: The Engineer will take no action on unsolicited submittals.

1.08 SUBSTITUTIONS

- A. Substitutions: Products considered to be able to perform the same function but not necessarily have the same design, arrangement, details, utility requirements and/or dimensions. Changes in products, materials, and equipment required by the Contract Documents proposed by the Contractor after award of the Contract are considered to be requests for substitutions. The following are not considered to be requests for substitutions:
1. Revisions to the Contract Documents requested by the Owner or Architect.
 2. Specified options of products or "approved equals" as permitted and included in the Contract Documents.

3. The Contractor's determination of and compliance with governing regulations and orders issued by governing authorities.
- B. Substitutions
1. Substitution Request: The Architect will consider requests for substitutions if received within 60 days after Notice to Proceed. Requests received more than 60 days after Notice to Proceed may be considered or rejected at the discretion of the Architect. The Architect will only consider requests for substitution submitted by the Prime Contractor whose work is involved. No substitution requests will be considered from manufacturer's representatives or product vendors unless submitted through a prime contractor. No substitution requests will be considered during the bid period. Bids shall be based on products from one of the manufacturers specified or an "or equal" product. Bidders shall submit products not indicated in the Specifications at their own risk. The Architect shall determine if a proposed product is equal to a specified product. Furthermore, regardless as to whether or not a manufacturer is listed in the Specification, that manufacturer or product is not relieved of its obligations to meet the technical requirements of the specified intent.
 - a. Transmit each request for substitution for consideration to the Architect's FTP Site; if hard copies or samples must be submitted as part of the substitution request, transmit a minimum of two (2) duplicate copies. Requests shall be on the Substitution Request Form found at the end of this Section. Requests not meeting this procedural requirement will be returned with no action taken.
 - b. Identify the product to be substituted in each request. Include related Specification Section and Drawing numbers.
 - c. Respond to all of the following items. Attach to the Substitution Request Form:
 - 1) Coordination information, including a list of changes or modifications needed to other parts of the Work and to construction performed by the Owner and/or separate Contractors, that will be necessary to accommodate the proposed substitution.
 - 2) A detailed comparison of significant qualities of the proposed substitution with those of the Work specified. Significant qualities may include elements, such as performance, weight, size, durability, and visual effect.
 - 3) Product Data, including Drawings and descriptions of products.
 - 4) Samples, where applicable or requested.
 - 5) A statement indicating the substitution's effect on the Contractor's Construction Schedule compared to the schedule without approval of the substitution. Indicate the effect of the proposed substitution on the overall Contract Time.
 - 6) Cost information, including a proposal of the net change, if any in the Contract Sum.
 - 7) The Contractor's certification that the proposed substitution conforms to all requirements of the Contract Documents in every respect and is appropriate for the applications indicated.
 - 8) The Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of the failure of the substitution to perform adequately.
 - (a) The Contractor's Certification that all costs of other Prime Contractors which are covered by the substitution will be borne by the substituting Contractor.
 - d. Architect's Action: The Architect will notify the Contractor of acceptance or rejection of the substitution within two (2) weeks of receipt of the request. If necessary, the Architect will request additional information or documentation for evaluation within one (1) week of receipt of a request.
 - 1) Use the product specified if the Architect cannot make a decision on the use of a proposed substitute within the time allocated. Following acceptance of the substitution, the Contractor shall submit related information and product data in accordance with Section 01300- Submittals.

2. Conditions for Consideration: The Architect will receive and consider the Contractor's request for substitution when one or more of the following conditions are satisfied, as determined by the Architect. Requests will be returned with no action taken if none of the following conditions are satisfied.
 - a. Extensive revisions to the Contract Documents are not required.
 - b. Proposed changes are in keeping with the general intent of the Contract Documents.
 - c. The specified product cannot be provided within the Contract Time. The Architect will not consider the request if the product cannot be provided as a result of the Contractor's failure to pursue the Work promptly.
 - d. The requested substitution offers the Owner a substantial advantage, in cost, time, or energy conservation.
 - e. The specified product cannot receive necessary approval by a governing authority.
 - f. The specified product cannot be provided in a manner that is compatible with other materials and where the Contractor certifies that the substitution will overcome the incompatibility.
 - g. The specified product cannot be coordinated with other materials and where the Contractor certifies that the proposed substitution can be coordinated.
 - h. The specified product cannot provide a warranty required by the Contract Documents and where the Contractor certifies that the proposed substitution provides the required warranty.
3. Conditions for Acceptance: Following evaluation by the Architect and in accordance with a Change Order, the Contractor may make a substitution only with the consent of the Owner.

PART 2 PRODUCTS

2.01 NOT USED.

PART 3 EXECUTION

3.01 NOT USED.

END OF SECTION

SECTION 01 3500

SAFETY

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

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

1.02 SUMMARY

- A. General: This Section specifies the required safety procedures for this Project.
- B. It is recognized that the safety of all personnel is the responsibility of each Prime Contractor involved in the construction of this Project. It is the contractual obligation of the Contractor to adhere to all requirements of the Occupational Health and Safety Act (OSHA), as well as Local, State, and Federal safety rules and regulations. Each Prime Contractor shall assure the safety of their personnel by providing all protection and safety devices, covers, etc. as they relate to the safe conduct of their work in accordance with all Local, State and Federal regulations. Each Prime Contractor is responsible for any safety requirements that are contractually those of any Contractor.
- C. The General Contractor shall be designated as the "Lead Contractor" with respect to jobsite safety. Responsibilities and authority of the General Contractor shall be as follows:
 - 1. This Contractor will be responsible to inspect and maintain safe working conditions on the jobsite.
 - 2. Where the work of one (1) Contractor places another Contractor's workers in jeopardy, the "Lead Contractor" shall direct and coordinate the effort of the Contractors to ensure that jobsite safety is maintained.
 - 3. This Contractor will maintain a "competent person" on site at all times designated to make safety inspections and to serve as the designated representative in charge of safety during the inspection by OSHA employees.
 - 4. This Contractor may direct another Contractor to make corrections in the event of a safety violation. Failure of another Contractor to take prompt action (within 24 hours following written notice) to correct a safety violation will empower this Contractor to make the necessary corrections and to receive full compensation for such corrections directly from the Owner. The Owner will verify and provide documentation of time and material expended to make corrections and in turn will recover the amount of expense from the offending Contractor through a deduct Change Order.
 - 5. This Contractor's responsibilities and corresponding authority will be as defined in the General Conditions of the Contract for Construction.
 - 6. The individual Prime Contractors will maintain primary responsibility for the safety of their workers. The "Lead Contractor" will serve to identify areas of concern and will endeavor to accomplish required corrections through cooperation of the other Prime Contractors. In the event this effort is unsuccessful, the "Lead Contractor" will take action as defined above.
 - 7. The Owner will make payment to the "Lead Contractor" when corrective action has been taken on behalf of an offending Contractor, and the "Lead Contractor" has provided appropriate documentation in accord with contract modification procedures.
 - 8. All Contractors shall provide regular and periodic safety inspections and reports. Inspections and reports shall be performed on a Daily basis.
 - 9. Each Prime Contractor shall provide a safety representative who is trained in First Aid and CPR.

PART 2 - PRODUCTS (NOT APPLICABLE)

PART 3 - EXECUTION

3.01 ACCIDENTS

- A. The Contractor shall notify the Owner of any personal injury that could require medical treatment of any Contractor or their subcontractor's employees at the project site. Also, any damage to property arising in connection with the Contractor's performance should be told to the Owner as promptly as possible after the occurrence of such injury or damage but at the maximum 24 hours. Within 48 hours of such occurrence, the Contractor shall furnish to the Owner a complete written report of such injury or damage. Accident Reports shall include specific actions taken by the Contractor to preclude recurrence of similar incidents.

3.02 EMERGENCY DATA

- A. The Contractor shall provide the Owner with the following emergency data prior to beginning work at the project site:
 - 1. Emergency care facility to be utilized, address and telephone number.
 - 2. Insurance company and local agent/name, address and telephone number.
 - 3. Detailed description of overall corporation or company Safety Program.
 - 4. Employees qualified in type of first aid, list employee and associated skill.
 - 5. Detailed description of specifically tailored job site safety program.
 - 6. Identify corporate and job site safety officer.
 - 7. Submit weekly TOOL BOX SAFETY TALK program/meeting minutes including:
 - a. Day of week.
 - b. Time of day.
 - c. Location.
 - d. Attendance record.
 - e. Agenda.
 - f. Unsafe items previously discussed, date of correction.
 - g. Identify on-site personnel with FIRST AID training.
 - h. All applicable MSDS Program sheets. (Include numbered pages and Table of Contents.
 - i. Submit completed hazardous substance survey form.
 - j. Review project "Emergency Response Plan" with the Owner.

3.03 SAFETY AGREEMENT

- A. The Contractor shall review and comply with the following Safety Agreement before beginning work:
 - 1. As a Contractor under this Contract, you have, by accepting this Contract, obligated yourself to conduct all your operations within this Safety Agreement.
 - 2. The Contractor agrees that the prevention of accidents to employees engaged in the Work under this Agreement is the responsibility of the Contractor.
 - 3. The Contractor agrees to comply with all laws, regulations and codes concerning safety as shall be applicable to the Work and to the safety standards established during the progress of the Work. When so ordered, the Contractor agrees to stop any part of the Work which the "Lead Contractor" or any other applicable agency may deem unsafe until corrective measures satisfactory to the Owner and in accordance with the applicable Federal and/or State regulations have been taken and further agrees to make no claim for damages growing out of such stoppages. Should the Contractor neglect to adopt such corrective measures, the Owner may elect to hire an entity, perform the corrections and deduct the cost from payments due or to become due the Contractor. Failure on the part of the Owner to stop unsafe practices shall in no way relieve the Contractor of his responsibility.
 - 4. The Contract realizes that an effective accident prevention program is to the mutual benefit of all Contractors through improved employee and public relations and through increased efficiency and production. Further, no accident prevention activity can be truly

effective without the sincere cooperation of each Contractor performing on the site. Your attention is directed, but not limited to the following items:

- B. Housekeeping
 - 1. Indiscriminate accumulations of debris, waste or scrap in work areas will not be permitted. (Areas will be designated for storage or disposal). All materials, tools and equipment must be stored in an orderly manner in designated areas.
- C. Personal Protection Equipment
 - 1. Contractors must furnish their employees with the proper type of personal protective equipment as required by the operations being performed, including, but not necessarily limited to the following:
 - a. Hard Hats must be furnished to employees and worn at ALL times when on this project, whether or not an overhead hazard exists or what state the project may be in.
 - b. The Owner requires that appropriate attire be worn at all times while employees are working on-site. Appropriate attire shall be as deemed necessary by the Owner and in accordance with all applicable OSHA regulations.
- D. Safety Meetings
 - 1. The Contractor is required to conduct and all employees are required to attend a "Tool Box" type safety meeting once a week. The meetings may either be presided over by the Contractor's foreman or another competent representative designated by the Contractor.
- E. Fire Protection
 - 1. The Contractor must supply approved fire extinguishers for emergency use within his own immediate area of operation, including the Contractor's office, tool and storage enclosures.
- F. Treatment of Injuries
 - 1. The Contractor shall require that all employees injured (no matter how slight) while working on this project, report immediately for First Aid Treatment. The Contractor shall maintain adequate First Aid Facilities in the field.
- G. Cooperation
 - 1. Any deviation from this course of action will be called to the attention of the Contractor for immediate correction. Conversely, the Contractor should call attention to any unsafe conditions or unsafe practice by other Contractors at the site.
- H. Installed Safety Apparatus
 - 1. Each Contractor is responsible for the reinstallation of safety apparatus installed by other Contractors if removed to facilitate the installation of their own Contract Work.
- I. Weapons Policy
 - 1. All persons are prohibited from carrying, possessing or storing a handgun, firearm, or weapon of any kind while on the Project site, regardless of whether the person has registered the weapon or is licensed to carry a concealed weapon.
 - 2. Failure to abide by all terms and conditions of this policy may result in discipline up to and including termination. Further, carrying any weapon onto the Owner's property in violation of this policy will be considered an act of criminal trespass and possession of a weapon will be grounds for immediate removal of the person from the Project Site, and may result in prosecution.
- J. Radios
 - 1. The playing of radios will not be permitted on this Project site.

END OF SECTION

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SECTION 01 4000
QUALITY REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Quality assurance.
- B. Quality Control Plan
- C. References and standards.
- D. Testing and inspection agencies and services.
- E. Control of installation.
- F. Mock-ups.
- G. Tolerances.
- H. Manufacturers' field services.
- I. Defect Assessment.

1.02 QUALITY ASSURANCE

- A. Testing Agency Qualifications:
 - 1. Prior to start of Work, submit agency name, address, and telephone number, and names of full time registered Engineer and responsible officer.
 - 2. Submit copy of report of laboratory facilities inspection made by NIST Construction Materials Reference Laboratory during most recent inspection, with memorandum of remedies of any deficiencies reported by the inspection.

1.03 CONTRACTOR'S QUALITY CONTROL PLAN

- A. Quality Control Plan - a written plan describing how the contractor will evaluate the work to confirm that it complies with the Contract Documents and authorities having jurisdiction. The Plan shall be submitted within 15 days following Notice to Proceed.
- B. The Prime contractor shall employ a Quality Control Inspector whose primary responsibility is to verify that the work in place meets the contract document requirements through inspections, review of testing, and coordination with subcontractors, manufactures, and suppliers. The Inspector's duties shall include, but not be limited to:
 - 1. monitor quality control over suppliers, manufacturers, products, services site conditions, and workmanship, to produce Work of specified quality.
 - 2. ensure work complies with manufacturers' instructions, including each step in sequence.
 - 3. request clarification from the appropriate party's should manufacturers' instructions conflict with Contract Documents.
 - 4. 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.
 - 5. ensure work is performed by persons qualified to produce workmanship of specified quality.
 - 6. secure products are in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, or disfigurement.
 - 7. ensure testing and inspection agencies are scheduled, proper tests and inspections are performed, and the work is in compliance with the requirements.
- C. Quality Control Reports - the Quality Control Inspector shall prepare a weekly Quality Control Report that summarizes all work completed, it's compliance with the Contract Documents, and any deficiencies that exist. The report shall be prepared in digital format and submitted at the weekly project meeting.

1.04 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. Maintain copy at project site during submittals, planning, and progress of the specific work, until Substantial Completion.
- E. Should specified reference standards conflict with Contract Documents, request clarification from Architect before proceeding.
- F. Neither the contractual relationships, duties, or responsibilities of the parties in Contract nor those of Architect shall be altered from the Contract Documents by mention or inference otherwise in any reference document.

1.05 TESTING AND INSPECTION AGENCIES AND SERVICES

- A. Contractor shall employ and pay for services of an independent testing agency to perform specified testing and inspection.
- B. Employment of agency in no way relieves Contractor of obligation to perform Work in accordance with requirements of Contract Documents.

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 Architect 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 MOCK-UPS

- A. Before installing portions of the Work where mock-ups are required, construct mock-ups in location and size indicated for each form of construction and finish required to comply with the following requirements, using materials indicated for the completed Work. The purpose of mock-up is to demonstrate the proposed range of aesthetic effects and workmanship.
- B. Accepted mock-ups establish the standard of quality the Architect will use to judge the Work.
- C. Integrated Exterior Mock-ups: construct integrated exterior mock-up as indicated on Drawings. Coordinate installation of exterior envelope materials and products as required in individual Specification Sections. Provide adequate supporting structure for mock-up materials as necessary.
- D. Room Mock-ups: Construct room mock-ups as indicated on Drawings. Coordinate installation of materials, products, and assemblies as required in Specification Sections; finish according to

requirements. Provide required lighting and any supplemental lighting where required to enable Architect to evaluate quality of the mock-up.

- E. Notify Architect and Owner seven (7) working days in advance of dates and times when mock-ups will be constructed.
- F. Provide supervisory personnel who will oversee mock-up construction. Provide workers that will be employed during the construction at Project.
- G. Tests shall be performed under provisions identified in this section and identified in the respective product specification sections.
- H. Assemble and erect specified items with specified attachment and anchorage devices, flashings, seals, and finishes.
- I. Obtain Architect's approval of mock-ups before starting work, fabrication, or construction.
 - 1. Architect will issue written comments within five (5) working days of initial review and each subsequent follow up review of each mock-up.
 - 2. Make corrections as necessary until Architect's approval is issued.
- J. Accepted mock-ups shall be a comparison standard for the remaining Work.
- K. Where mock-up has been accepted by Architect and is specified in product specification sections to be removed, protect mock-up throughout construction, remove mock-up and clear area when directed to do so by Architect.
- L. Where possible salvage and recycle the demolished mock-up materials.

3.03 TOLERANCES

- A. Monitor fabrication and installation tolerance control of products to produce acceptable Work. Do not permit tolerances to accumulate.
- B. Comply with manufacturers' tolerances. Should manufacturers' tolerances conflict with Contract Documents, request clarification from Architect before proceeding.
- C. Adjust products to appropriate dimensions; position before securing products in place.

3.04 TESTING AND INSPECTION

- A. See individual specification sections for testing and inspection required.
- B. Testing Agency Duties:
 - 1. Provide qualified personnel at site. Cooperate with Architect and Contractor in performance of services.
 - 2. Perform specified sampling and testing of products in accordance with specified standards.
 - 3. Ascertain compliance of materials and mixes with requirements of Contract Documents.
 - 4. Promptly notify Architect and Contractor of observed irregularities or non-conformance of Work or products.
 - 5. Perform additional tests and inspections required by Architect.
 - 6. Submit reports of all tests/inspections specified.
- C. Limits on Testing/Inspection Agency Authority:
 - 1. Agency may not release, revoke, alter, or enlarge on requirements of Contract Documents.
 - 2. Agency may not approve or accept any portion of the Work.
 - 3. Agency may not assume any duties of Contractor.
 - 4. Agency has no authority to stop the Work.
- D. Contractor Responsibilities:
 - 1. Deliver to agency at designated location, adequate samples of materials proposed to be used that require testing, along with proposed mix designs.
 - 2. Cooperate with laboratory personnel, and provide access to the Work and to manufacturers' facilities.
 - 3. Provide incidental labor and facilities:

- a. To provide access to Work to be tested/inspected.
- b. To obtain and handle samples at the site or at source of Products to be tested/inspected.
- c. To facilitate tests/inspections.
- d. To provide storage and curing of test samples.
- 4. Notify Architect and laboratory 48 hours prior to expected time for operations requiring testing/inspection services.
- 5. Employ services of an independent qualified testing laboratory and pay for additional samples, tests, and inspections required by Contractor beyond specified requirements.
- 6. Arrange with Owner's agency and pay for additional samples, tests, and inspections required by Contractor beyond specified requirements.
- E. Re-testing required because of non-conformance to specified requirements shall be performed by the same agency on instructions by Architect.
- F. Re-testing required because of non-conformance to specified requirements shall be paid for by Contractor.

3.05 MANUFACTURERS' FIELD SERVICES

- A. When specified in individual specification sections, require material or product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, start-up of equipment, test, adjust and balance of equipment as applicable, and to initiate instructions when necessary.
- B. Report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.

3.06 DEFECT ASSESSMENT

- A. Replace Work or portions of the Work not conforming to specified requirements.
- B. If, in the opinion of Owner, it is not practical to remove and replace the Work, Owner will direct an appropriate remedy or adjust payment.

END OF SECTION

SECTION 01 4216

DEFINITIONS

PART 1 GENERAL

1.01 SUMMARY

- A. This section supplements the definitions contained in the General Conditions.
- B. Other definitions are included in individual specification sections.

1.02 DEFINITIONS

- A. Furnish: To supply, deliver, unload, and inspect for damage.
- B. Install: To unpack, assemble, erect, apply, place, finish, cure, protect, clean, start up, and make ready for use.
- C. Product: Material, machinery, components, equipment, fixtures, and systems forming the work result. Not materials or equipment used for preparation, fabrication, conveying, or erection and not incorporated into the work result. Products must be new, never before used.
- D. Project Manual: The book-sized volume that includes the procurement requirements (if any), the contracting requirements, and the specifications.
- E. Provide: To furnish and install.
- F. Supply: Same as Furnish.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

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SECTION 01 5000
TEMPORARY FACILITIES AND CONTROLS

PART 1 GENERAL

1.01. SECTION INCLUDES

- A. Sanitary Provisions.
- B. Temporary Water.
- C. Temporary Power.
- D. Temporary Heat
- E. Telephone.
- F. Safety and Protection.
- G. Hoisting Facilities.
- H. Storage.
- I. Parking.
- J. Progress Cleaning and Waste Removal.
- K. Removal.

1.02. SANITARY PROVISIONS

- A. Contractor to provide portable toilet facilities.

1.03. TEMPORARY WATER

- A. Contractor may use existing water service in the building. Coordinate available locations with the owner and building maintenance personnel.

1.04. TEMPORARY POWER

- A. Contractor may use existing electric service in the building. Coordinate available locations with the owner and building maintenance personnel.

1.05. TEMPORARY HEAT

- A. Not Required

1.06. TELEPHONE

- A. The contractor shall provide cell phone numbers of onsite project superintendent(s), provided that they are onsite at all times work is in progress.
- B. The engineer and owner shall always have the ability to contact the contractor at site.

1.07. SAFETY AND PROTECTION

- A. The Contractor shall:
 - 1. Furnish all required safety and first aid requirements in complete accord with all OSHA Regulations.
 - 2. Furnish all necessary enclosures, flares and lights, traffic regulation flag men and traffic signals.
 - 3. Furnish all necessary bracing, scaffolding, protective covers, drop cloths, and other construction aids.
 - 4. Erect and maintain proper protection for all equipment and all parts of the building during all stages of construction, alterations, or repairs, and shall correct at their own expense any damage to the same to the satisfaction of the Owner. Special precaution shall be taken to protect the building and grounds from damage during the course of construction of the project.
 - 5. The Contractor shall take proper and necessary precautions to protect pedestrians, streets, sidewalks, private roads and walks, and will be held responsible for any damage or injury.
 - 6. Provide and maintain guard lights at barricades, railings, obstructions in the streets, or sidewalks.

7. Maintain and enforce regulations covering all fire hazards including smoking and shall provide suitable fire extinguishers and/or other protective measures in proper locations.
8. Adequately protect all utilities and service lines. Services and utilities must not be interrupted without first making necessary and satisfactory arrangements with the proper authorities.
9. Furnish all necessary noise control and dust control measures.
10. Provide for proper storage, removal and disposal of all debris, trash, rubbish and garbage. Comply with all applicable federal, state and local regulations dealing with environmental protection measures and dealing with hazardous materials.
11. Provide all necessary security measures including locked storage, night lights, and temporary enclosures. The Owner may, at any time direct the general contractor to provide additional security, including fencing and temporary enclosures, and watchman if required.
12. Safety provisions shall be in compliance with Article 10 of the General Conditions.
13. Active work areas shall be fenced with a 4' high orange safety fence. All posts must have protective caps and the fence must be inspected and maintained each work day.

1.08. HOISTING FACILITIES

- A. The Contractor shall provide, maintain and operate, at no cost to the Owner, all required lifting, jacking or hoisting equipment of capacities as needed to perform all work. Comply with all safety requirements.
- B. The Contractor shall provide, maintain and operate, at no cost to the Owner, all required scaffolding, bracing, walkways and support as needed to perform all work. Comply with all safety requirements.

1.09. STORAGE

- A. No storage of tools, equipment, or materials will be permitted in the building, except in designated work areas during each phase of construction.
- B. It shall be the Contractor's responsibility to arrange with the proper authorities, the owner for an assigned space or spaces for any necessary trailers, vans, or sheds for use as material, tool and equipment storage or job office. Locate trailers outside of improvement areas to prevent interference or delays in the project.

1.10. PARKING

- A. Limited parking for construction workers may be made available on site by pre-arrangement with the Owner, however adequate space for Owner use must be maintained.
- B. The Contractor shall be responsible for arranging parking for themselves and their sub-contractors.

1.11. PROGRESS CLEANING AND WASTE REMOVAL

- A. The Contractor shall:
 1. Maintain areas free of waste materials, debris, and rubbish.
 2. Maintain site in a clean and orderly condition.
 3. Remove debris and rubbish from attics, and other closed or remote spaces, prior to enclosing the space.
 4. Daily broom clean work areas.
 5. Collect and remove waste materials, debris, and rubbish daily from site and dispose in a dumpster or off-site.
 6. Remove tools, scaffolding and surplus materials at the completion of work.

- 7. Broom and vacuum clean work areas at the completion of work.
- B. The Contractor shall provide for a dumpster on site for his own use and for miscellaneous daily trash. Make special provisions for handling hazardous waste in compliance with all local, state, and federal regulations.
- C. The Contractor shall be responsible for proper collection, storage and disposal of waste materials (excepting hazardous materials) resulting from demolition packaging and crating.
- D. The Contractor shall clean work area of all construction debris at the end of each workday. The debris shall be placed in a dumpster and removed from the site as soon as the dumpster is full. Debris shall be deposited of in accordance with all Local, State & federal regulations.
- E. No burning is permitted.

1.12. REMOVAL

- A. Remove all temporary facilities completely from the site upon completion of the project.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

END OF SECTION

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SECTION 01 5500
VEHICULAR ACCESS AND PARKING

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Access roads.
- B. Parking.
- C. Existing pavements and parking areas.
- D. Permanent pavements and parking facilities.
- E. Construction parking controls.
- F. Flag persons.
- G. Flares and lights.
- H. Haul routes.
- I. Traffic signs and signals.
- J. Maintenance.
- K. Removal, repair.
- L. Mud from site vehicles.

PART 2 PRODUCTS

2.01 SIGNS, SIGNALS, AND DEVICES

- A. Traffic Cones and Drums, Flares and Lights: As approved by local jurisdictions.
- B. Flag Person Equipment: As required by local jurisdictions.

PART 3 EXECUTION

3.01 PREPARATION

- A. Clear areas, provide surface and storm drainage of road, parking, area premises, and adjacent areas.

3.02 ACCESS ROADS

- A. Use of existing on-site streets and driveways for construction traffic is not permitted without the approval of the authority having jurisdiction.
- B. Tracked vehicles not allowed on paved areas.
- C. Provide unimpeded access for emergency vehicles. Maintain 12 foot width driveways with turning space between and around combustible materials.
- D. Provide and maintain access to fire hydrants free of obstructions.

3.03 PARKING

- A. Use of existing parking facilities by construction personnel is not permitted.
- B. Use of new parking facilities by construction personnel is not permitted.
- C. Arrange for temporary parking areas to accommodate use of construction personnel.

3.04 PERMANENT PAVEMENTS AND PARKING FACILITIES

- A. The base for permanent roads and parking areas may be used for construction traffic.
- B. Avoid traffic loading beyond paving design capacity. Tracked vehicles not allowed.

3.05 CONSTRUCTION PARKING CONTROL

- A. Control vehicular parking to prevent interference with public traffic and parking, access by emergency vehicles, and Owner's operations.
- B. Monitor parking of construction personnel's vehicles in existing facilities. Maintain vehicular access to and through parking areas.

- C. Prevent parking on or adjacent to access roads or in non-designated areas.

3.06 FLAG PERSONS

- A. Provide trained and equipped flag persons to regulate traffic when construction operations or traffic encroach on public traffic lanes.

3.07 FLARES AND LIGHTS

- A. Use flares and lights during hours of low visibility to delineate traffic lanes and to guide traffic.

3.08 HAUL ROUTES

- A. Consult with authority having jurisdiction, establish public thoroughfares to be used for haul routes and site access.
- B. Confine construction traffic to designated haul routes.
- C. Provide traffic control at critical areas of haul routes to regulate traffic, to minimize interference with public traffic.

3.09 TRAFFIC SIGNS AND SIGNALS

- A. At approaches to site and on site, install at crossroads, detours, parking areas, and elsewhere as needed to direct construction and affected public traffic.
- B. Install and operate traffic control signals to direct and maintain orderly flow of traffic in areas under Contractor's control, and areas affected by Contractor's operations.
- C. Relocate as Work progresses, to maintain effective traffic control.

3.10 MAINTENANCE

- A. Maintain traffic and parking areas in a sound condition free of excavated material, construction equipment, Products, mud, snow, and ice.
- B. Maintain existing paved areas used for construction; promptly repair breaks, potholes, low areas, standing water, and other deficiencies, to maintain paving and drainage in original, or specified, condition.

3.11 REMOVAL, REPAIR

- A. Remove temporary roads when permanent paving is usable.
- B. Repair existing facilities damaged by use, to new condition.
- C. Repair damage caused by installation.

3.12 MUD FROM SITE VEHICLES

- A. Provide means of removing mud from vehicle wheels before entering streets.

3.13 DELIVERY OF EQUIPMENT AND MATERIALS

- A. Contractor must coordinate and arrange for the delivery and staging of materials and equipment to the project site.
- B. Equipment and materials may not be stored in the streets, alleys, or adjacent properties without approval of the authority having jurisdiction.

END OF SECTION

SECTION 01 6000
PRODUCT REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

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

PART 2 PRODUCTS

2.01 EXISTING PRODUCTS

- A. Do not use materials and equipment removed from existing premises unless specifically required or permitted by the Contract Documents.
- B. Unforeseen historic items encountered remain the property of the Owner; notify Owner promptly upon discovery; protect, remove, handle, and store as directed by Owner.
- C. Existing materials and equipment indicated to be removed, but not to be re-used, relocated, reinstalled, delivered to the Owner, or otherwise indicated as to remain the property of the Owner, become the property of the Contractor; remove from site.

2.02 NEW PRODUCTS

- A. Provide new products unless specifically required or permitted by the Contract Documents.
- B. DO NOT USE products having any of the following characteristics:
 - 1. Containing lead, cadmium, asbestos.
- C. Where all other criteria are met, Contractor shall give preference to products that:
 - 1. Are extracted, harvested, and/or manufactured closer to the location of the project.
 - 2. Have longer documented life span under normal use.
 - 3. Result in less construction waste.

2.03 STANDARD OF QUALITY

- A. The various materials and products specified in the specifications by name or description are given to establish a standard of quality and cost for bid purposes. 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. When proprietary names are used, they shall be followed by the words "or alternatives of the quality necessary to meet the specifications". A bid containing an alternative which does not meet the specifications may be declared non-responsive. A bid containing an alternative may be accepted but, if an award is made to that bidder, the bidder will be required to replace any alternatives which do not meet the specifications.
- B. No approval prior to bidding and no listing on Proposal Forms will be required. It will, however, be the responsibility of the Contractor to obtain the Owner/engineer's approval for any product or material not named by submitting adequate data for proper evaluation after contract award and prior to confirmation of order for any such item.
- C. Contractor will be responsible for all changes required for installation of any approved equal or accepted substituted item at no additional cost to the Owner.

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 to Project site; obtain receipt prior to final payment.

PART 3 EXECUTION

3.01 SUBSTITUTION PROCEDURES

- A. Substitutions will only be considered after contract award.
- B. Document each request with complete data substantiating compliance of proposed substitution with Contract Documents.
- C. 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 Owner.
 - 4. Waives claims for additional costs or time extension that may subsequently become apparent.
 - 5. Agrees to reimburse Owner and Architect for review or redesign services associated with re-approval by authorities.
- D. 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.
- E. Substitution Submittal Procedure (after contract award):
 - 1. Submit substitution requests by completing the form in Section 01 3300 Submittals, see this section for additional information and instructions.
 - 2. Submit shop drawings, product data, and certified test results attesting to the proposed product equivalence. Burden of proof is on proposer.
 - 3. Architect will notify Contractor in writing of decision to accept or reject request.

3.02 OWNER-SUPPLIED PRODUCTS

- A. Owner's Responsibilities:
 - 1. Arrange for and deliver Owner reviewed shop drawings, product data, and samples, to Contractor.
 - 2. Arrange and pay for product delivery to site.
 - 3. On delivery, inspect products jointly with Contractor.
 - 4. Submit claims for transportation damage and replace damaged, defective, or deficient items.
 - 5. Arrange for manufacturers' warranties, inspections, and service.
- B. Contractor's Responsibilities:
 - 1. Review Owner reviewed shop drawings, product data, and samples.
 - 2. Receive and unload products at site; inspect for completeness or damage jointly with Owner.
 - 3. Handle, store, install and finish products.
 - 4. Repair or replace items damaged after receipt.

3.03 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 stored materials.
- 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.

- F. Promptly inspect shipments to ensure that products comply with requirements, quantities are correct, and products are undamaged.
- G. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage, and to minimize handling.
- H. Arrange for the return of packing materials, such as wood pallets, where economically feasible.

3.04 STORAGE AND PROTECTION

- A. 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.
- B. Store and protect products in accordance with manufacturers' instructions.
- C. Store with seals and labels intact and legible.
- D. Store sensitive products in weather tight, climate controlled, enclosures in an environment favorable to product.
- E. For exterior storage of fabricated products, place on sloped supports above ground.
- F. Provide bonded off-site storage and protection when site does not permit on-site storage or protection.
- G. Protect products from damage or deterioration due to construction operations, weather, precipitation, humidity, temperature, sunlight and ultraviolet light, dirt, dust, and other contaminants.
- H. Comply with manufacturer's warranty conditions, if any.
- I. Do not store products directly on the ground.
- J. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.
- K. Store loose granular materials on solid flat surfaces in a well-drained area. Prevent mixing with foreign matter.
- L. Prevent contact with material that may cause corrosion, discoloration, or staining.
- M. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.
- N. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.

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. Requirements for alterations work, including selective demolition, except removal, disposal, and/or remediation of hazardous materials and toxic substances.
- C. Pre-installation meetings.
- D. Cutting and patching.
- E. Surveying for laying out the work.
- F. Cleaning and protection.
- G. Starting of systems and equipment.
- H. Demonstration and instruction of Owner personnel.
- I. Closeout procedures, including Contractor's Correction Punch List, except payment procedures.
- J. General requirements for maintenance service.

1.02 RELATED REQUIREMENTS

- A. Section 01 1000 - Summary: Limitations on working in existing building; continued occupancy; work sequence; identification of salvaged and relocated materials.
- B. Section 01 3000 - Administrative Requirements: Submittals procedures.
- C. Section 01 4000 - Quality Requirements: Testing and inspection procedures.
- D. Section 01 5000 - Temporary Facilities and Controls: Temporary exterior enclosures.
- E. Section 01 5000 - Temporary Facilities and Controls: Temporary interior partitions.
- F. Section 01 5100 - Temporary Utilities: Temporary heating, cooling, and ventilating facilities.
- G. Section 01 5713 - Temporary Erosion and Sediment Control: Additional erosion and sedimentation control requirements.
- H. Section 01 7800 - Closeout Submittals: Project record documents, operation and maintenance data, warranties and bonds.

1.03 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Survey work: Submit name, address, and telephone number of Surveyor before starting survey work.
 - 1. On request, submit documentation verifying accuracy of survey work.
 - 2. Submit a copy of site drawing signed by the Land Surveyor, that the elevations and locations of the work are in conformance with Contract Documents.
 - 3. Submit surveys and survey logs for the project record.
- C. 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. Include design drawings and calculations for bracing and shoring.
 - 2. Identify demolition firm and submit qualifications.
 - 3. Include a summary of safety procedures.
- D. Project Record Documents: Accurately record actual locations of capped and active utilities.

1.04 QUALIFICATIONS

- A. For demolition work, employ a firm specializing in the type of work required.

- B. For survey work, employ a land surveyor registered in the State in which the Project is located and acceptable to Architect. Submit evidence of Surveyor's Errors and Omissions insurance coverage in the form of an Insurance Certificate.
- C. For design of temporary shoring and bracing, employ a Professional Engineer experienced in design of this type of work and licensed in the State in which the Project is located.

1.05 PROJECT CONDITIONS

- A. Use of explosives is not permitted.
- B. Grade site to drain. Maintain excavations free of water. Provide, operate, and maintain pumping equipment.
- C. Protect site from puddling or running water. Provide water barriers as required to protect site from soil erosion.
- D. Ventilate enclosed areas to assist cure of materials, to dissipate humidity, and to prevent accumulation of dust, fumes, vapors, or gases.
- E. 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 Owner.
- F. Erosion and Sediment Control: Plan and execute work by methods to control surface drainage from cuts and fills, from borrow and waste disposal areas. Prevent erosion and sedimentation.
- G. 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.
- H. 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.

1.06 COORDINATION

- A. 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.
- B. Notify affected utility companies and comply with their requirements.
- C. Verify that utility requirements and characteristics of new operating equipment are compatible with building utilities. Coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.
- D. Coordinate space requirements, supports, and installation of mechanical and electrical work that are indicated diagrammatically on Drawings. Follow routing shown for pipes, ducts, and conduit, as closely as practicable; place runs parallel with lines of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.
- E. In finished areas except as otherwise indicated, conceal pipes, ducts, and wiring within the construction. Coordinate locations of fixtures and outlets with finish elements.
- F. Coordinate completion and clean-up of work of separate sections.
- G. After Owner occupancy of premises, coordinate access to site for correction of defective work and work not in accordance with Contract Documents, to minimize disruption of Owner's activities.

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.
- B. Product Substitution: For any proposed change in materials, submit request for substitution described in Section 01 6000 - Product Requirements.

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. Verify that utility services are available, of the correct characteristics, and in the correct locations.
- F. 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.

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 PREINSTALLATION MEETINGS

- A. When required in individual specification sections, convene a preinstallation meeting at the site prior to commencing work of the section.
- B. Require attendance of parties directly affecting, or affected by, work of the specific section.
- C. Notify Architect four days in advance of meeting date.
- D. Prepare agenda and preside at meeting:
 - 1. Review conditions of examination, preparation and installation procedures.
 - 2. Review coordination with related work.
- E. Record minutes and distribute copies within two days after meeting to participants, with one copies to Architect, Owner, participants, and those affected by decisions made.

3.04 LAYING OUT THE WORK

- A. Verify locations of survey control points prior to starting work.
- B. Promptly notify Architect of any discrepancies discovered.
- C. Contractor shall locate and protect survey control and reference points.
- D. Control datum for survey is that indicated on Drawings.
- E. Protect survey control points prior to starting site work; preserve permanent reference points during construction.
- F. Promptly report to Architect the loss or destruction of any reference point or relocation required because of changes in grades or other reasons.

- G. Replace dislocated survey control points based on original survey control. Make no changes without prior written notice to Architect.
- H. Utilize recognized engineering survey practices.
- I. Establish elevations, lines and levels. Locate and lay out by instrumentation and similar appropriate means:
 - 1. Site improvements including pavements; stakes for grading, fill and topsoil placement; utility locations, slopes, and invert elevations.
- J. Periodically verify layouts by same means.
- K. Maintain a complete and accurate log of control and survey work as it progresses.

3.05 GENERAL INSTALLATION REQUIREMENTS

- A. 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.
- B. Make vertical elements plumb and horizontal elements level, unless otherwise indicated.
- C. Install equipment and fittings plumb and level, neatly aligned with adjacent vertical and horizontal lines, unless otherwise indicated.
- D. Make consistent texture on surfaces, with seamless transitions, unless otherwise indicated.
- E. Make neat transitions between different surfaces, maintaining texture and appearance.

3.06 ALTERATIONS

- A. Drawings showing existing construction and utilities are based on casual field observation and existing record documents only.
 - 1. Verify that construction and utility arrangements are as shown.
 - 2. Report discrepancies to Architect before disturbing existing installation.
 - 3. Beginning of alterations work constitutes acceptance of existing conditions.
- B. Keep areas in which alterations are being conducted separated from other areas that are still occupied.
 - 1. Provide, erect, and maintain temporary dustproof partitions of construction specified in Section 01 5000 in locations indicated on drawings.
- C. Maintain weatherproof exterior building enclosure except for interruptions required for replacement or modifications; take care to prevent water and humidity damage.
 - 1. Where openings in exterior enclosure exist, provide construction to make exterior enclosure weatherproof.
 - 2. Insulate existing ducts or pipes that are exposed to outdoor ambient temperatures by alterations work.
- D. Remove existing work as indicated and as required to accomplish new work.
 - 1. Remove rotted wood, corroded metals, and deteriorated masonry and concrete; replace with new construction specified.
 - 2. Remove items indicated on drawings.
 - 3. Relocate items indicated on drawings.
 - 4. 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.
 - 5. 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, Electrical, and Telecommunications): Remove, relocate, and extend existing systems to accommodate new construction.
 - 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.

2. Where existing systems or equipment are not active and Contract Documents require reactivation, put back into operational condition; repair supply, distribution, and equipment as required.
 3. 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.
 - a. Disable existing systems only to make switchovers and connections; minimize duration of outages.
 - b. See Section 01 1000 for other limitations on outages and required notifications.
 - c. Provide temporary connections as required to maintain existing systems in service.
 4. Verify that abandoned services serve only abandoned facilities.
 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. Prevent movement of structure; provide shoring and bracing if necessary.
 2. Perform cutting to accomplish removals neatly and as specified for cutting new work.
 3. Repair adjacent construction and finishes damaged during removal work.
- G. Adapt existing work to fit new work: Make as neat and smooth transition as possible.
1. When existing finished surfaces are cut so that a smooth transition with new work is not possible, terminate existing surface along a straight line at a natural line of division and make recommendation to Architect.
 2. Where removal of partitions or walls results in adjacent spaces becoming one, rework floors, walls, and ceilings to a smooth plane without breaks, steps, or bulkheads.
 3. Where a change of plane of 1/4 inch or more occurs in existing work, submit recommendation for providing a smooth transition for Architect review and request instructions.
- 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. Refinish existing surfaces as indicated:
1. Where rooms or spaces are indicated to be refinished, refinish all visible existing surfaces to remain to the specified condition for each material, with a neat transition to adjacent finishes.
 2. If mechanical or electrical work is exposed accidentally during the work, re-cover and refinish to match.
- J. Clean existing systems and equipment.
- K. Remove demolition debris and abandoned items from alterations areas and dispose of off-site; do not burn or bury.
- L. Do not begin new construction in alterations areas before demolition is complete.
- M. Comply with all other applicable requirements of this section.

3.07 CUTTING AND PATCHING

- A. Whenever possible, execute the work by methods that avoid cutting or patching.
- B. See Alterations article above for additional requirements.
- C. Perform whatever cutting and patching is necessary to:
 1. Complete the work.
 2. Fit products together to integrate with other work.
 3. Provide openings for penetration of mechanical, electrical, and other services.
 4. Match work that has been cut to adjacent work.
 5. Repair areas adjacent to cuts to required condition.

6. Repair new work damaged by subsequent work.
 7. Remove samples of installed work for testing when requested.
 8. Remove and replace defective and non-conforming work.
- D. 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 specified condition.
 - E. Employ skilled and experienced installer to perform cutting for weather exposed and moisture resistant elements, and sight exposed surfaces.
 - F. Cut rigid materials using masonry saw or core drill. Pneumatic tools not allowed without prior approval.
 - G. Restore work with new products in accordance with requirements of Contract Documents.
 - H. Fit work air tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
 - I. At penetrations of fire rated walls, partitions, ceiling, or floor construction, completely seal voids with fire rated material in accordance with Section 07 8400, to full thickness of the penetrated element.
 - J. 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.

3.08 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. Collect and remove waste materials, debris, and trash/rubbish from site periodically and dispose off-site; do not burn or bury.

3.09 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 coverings if possible.

3.10 SYSTEM STARTUP

- A. Coordinate schedule for start-up of various equipment and systems.

- B. Notify Architect and owner seven days prior to start-up of each item.
- C. Verify that each piece of equipment or system has been checked for proper lubrication, drive rotation, belt tension, control sequence, and for conditions that may cause damage.
- D. Verify tests, meter readings, and specified electrical characteristics agree with those required by the equipment or system manufacturer.
- E. Verify that wiring and support components for equipment are complete and tested.
- F. Execute start-up under supervision of applicable Contractor personnel and manufacturer's representative in accordance with manufacturers' instructions.
- G. When specified in individual specification Sections, require manufacturer to provide authorized representative to be present at site to inspect, check, and approve equipment or system installation prior to start-up, and to supervise placing equipment or system in operation.
- H. Submit a written report that equipment or system has been properly installed and is functioning correctly.

3.11 DEMONSTRATION AND INSTRUCTION

- A. Demonstrate operation and maintenance of products to Owner's personnel two weeks prior to date of Substantial Completion.
- B. Demonstrate start-up, operation, control, adjustment, trouble-shooting, servicing, maintenance, and shutdown of each item of equipment at scheduled time, at equipment location.
- C. For equipment or systems requiring seasonal operation, perform demonstration for other season within six months.
- D. Provide a qualified person who is knowledgeable about the Project to perform demonstration and instruction of owner personnel.
- E. Utilize operation and maintenance manuals as basis for instruction. Review contents of manual with Owner's personnel in detail to explain all aspects of operation and maintenance.
- F. Prepare and insert additional data in operations and maintenance manuals when need for additional data becomes apparent during instruction.

3.12 ADJUSTING

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

3.13 FINAL CLEANING

- A. Use cleaning materials that are nonhazardous.
- B. Clean interior and exterior glass, surfaces exposed to view; remove temporary labels, stains and foreign substances, polish transparent and glossy surfaces, vacuum carpeted and soft surfaces.
- 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 equipment and fixtures to a sanitary condition with cleaning materials appropriate to the surface and material being cleaned.
- E. Clean filters of operating equipment.
- F. Clean debris from roofs, gutters, downspouts, scuppers, overflow drains, area drains, and drainage systems.
- G. Clean site; sweep paved areas, rake clean landscaped surfaces.
- H. Remove waste, surplus materials, trash/rubbish, and construction facilities from the site; dispose of in legal manner; do not burn or bury.

3.14 CLOSEOUT PROCEDURES

- A. Make submittals that are required by governing or other authorities.
 - 1. Provide copies to Architect and Owner.

- B. Accompany Project Coordinator on preliminary inspection to determine items to be listed for completion or correction in the Contractor's Correction Punch List for Contractor's Notice of Substantial Completion.
- C. Notify Architect when work is considered ready for Architect's Substantial Completion inspection.
- D. Submit written certification containing Contractor's Correction Punch List, that Contract Documents have been reviewed, work has been inspected, and that work is complete in accordance with Contract Documents and ready for Architect's Substantial Completion inspection.
- E. Conduct Substantial Completion inspection and create Final Correction Punch List containing Architect's and Contractor's comprehensive list of items identified to be completed or corrected and submit to Architect.
- F. Correct items of work listed in Final Correction Punch List and comply with requirements for access to Owner-occupied areas.
- G. Notify Architect when work is considered finally complete and ready for Architect's Substantial Completion final inspection.
- H. Complete items of work determined by Architect listed in executed Certificate of Substantial Completion.

3.15 MAINTENANCE

- A. Provide service and maintenance of components indicated in specification sections.
- B. Maintenance Period: As indicated in specification sections or, if not indicated, not less than one year from the Date of Substantial Completion or the length of the specified warranty, whichever is longer.
- C. Examine system components at a frequency consistent with reliable operation. Clean, adjust, and lubricate as required.
- D. Include systematic examination, adjustment, and lubrication of components. Repair or replace parts whenever required. Use parts produced by the manufacturer of the original component.
- E. Maintenance service shall not be assigned or transferred to any agent or subcontractor without prior written consent of the Owner.

END OF SECTION

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. Section 01 3000 - Administrative Requirements: Submittals procedures, shop drawings, product data, and samples.
- B. Section 01 7000 - Execution and Closeout Requirements: Contract closeout procedures.
- C. Individual Product Sections: Specific requirements for operation and maintenance data.
- D. Individual Product Sections: Warranties required for specific products or Work.

1.03 SUBMITTALS

- A. Project Record Documents: Submit documents to Architect 15 days prior to final inspection. This copy will be reviewed and returned after final inspection, with Architect comments. Revise content of all documents as required prior to final submission.
- B. Operation and Maintenance Data:
 - 1. For equipment, or component parts of equipment put into service during construction and operated by Owner, submit completed documents within ten days after acceptance.
 - 2. Submit one copy of completed documents 15 days prior to final inspection. This copy will be reviewed and returned after final inspection, with Architect comments. Revise content of all document sets as required prior to final submission.
 - 3. Submit two sets of revised final documents in final form within 10 days after final inspection.
 - 4. In addition to the hard copy binders, submit a digital (PDF) format copy.
- C. Warranties and Bonds:
 - 1. For equipment or component parts of equipment put into service during construction with Owner'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.
 - 4. In addition to the hard copy binders, submit a digital (PDF) format copy.

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.
- B. Ensure entries are complete and accurate, enabling future reference by Owner.
- 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. All filed markups shall be converted to PDF format using professional software capable of producing legible and detailed notations. A scanned version of the hand drawings is not acceptable.
 - 6. Details not on original Contract drawings.
- G. Final Record Document Set: Submit Final PDF markups both in digital format and two copies of the full size drawing sets.

3.02 OPERATION AND MAINTENANCE DATA

- A. Source Data: 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.
 - 2. Information for re-ordering custom manufactured products.
- 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. Where additional instructions are required, beyond the manufacturer's standard printed instructions, have instructions prepared by personnel experienced in the operation and maintenance of the specific products.

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. Where additional instructions are required, beyond the manufacturer's standard printed instructions, have instructions prepared by personnel experienced in the operation and maintenance of the specific products.

- C. 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.
- D. 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.
- E. Provide servicing and lubrication schedule, and list of lubricants required.
- F. Include manufacturer's printed operation and maintenance instructions.
- G. Include sequence of operation by controls manufacturer.
- H. Provide original manufacturer's parts list, illustrations, assembly drawings, and diagrams required for maintenance.
- I. Provide Contractor's coordination drawings, with color coded piping diagrams as installed.
- J. Provide charts of valve tag numbers, with location and function of each valve, keyed to flow and control diagrams.
- K. Provide list of original manufacturer's spare parts, current prices, and recommended quantities to be maintained in storage.
- L. Include test and balancing reports.
- M. Additional Requirements: As specified in individual product specification sections.

3.05 ASSEMBLY OF OPERATION AND MAINTENANCE MANUALS

- A. Assemble operation and maintenance data into durable manuals for Owner's personnel use, with data arranged in the same sequence as, and identified by, the specification sections.
- B. Where systems involve more than one specification section, provide separate tabbed divider for each system.
- C. 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.
- D. Cover: Identify each binder with typed or printed title OPERATION AND MAINTENANCE INSTRUCTIONS; identify title of Project; identify subject matter of contents.
- E. Project Directory: Title and address of Project; names, addresses, and telephone numbers of Architect, Consultants, Contractor and subcontractors, with names of responsible parties.
- F. Tables of Contents: List every item separated by a divider, using the same identification as on the divider tab; where multiple volumes are required, include all volumes Tables of Contents in each volume, with the current volume clearly identified.
- G. Dividers: Provide tabbed dividers for each separate product and system; identify the contents on the divider tab; immediately following the divider tab include a description of product and major component parts of equipment.
- H. Text: Manufacturer's printed data, or typewritten data on 20 pound paper.
- I. Drawings: Provide with reinforced punched binder tab. Bind in with text; fold larger drawings to size of text pages.
- J. Arrangement of Contents: Organize each volume in parts as follows:
 - 1. Project Directory.
 - 2. Table of Contents, of all volumes, and of this volume.
 - 3. Operation and Maintenance Data: Arranged by system, then by product category.
 - a. Source data.
 - b. Product data, shop drawings, and other submittals.
 - c. Operation and maintenance data.
 - d. Field quality control data.
 - e. Photocopies of warranties and bonds.

4. Design Data: To allow for addition of design data furnished by Architect or others, provide a tab labeled "Design Data" and provide a binder large enough to allow for insertion of at least 20 pages of typed text.

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 Owner's permission, leave date of beginning of time of warranty until Date of Substantial completion is determined.
- B. Verify that documents are in proper form, contain full information, and are notarized.
- C. Co-execute submittals when required.
- D. Retain warranties and bonds until time specified for submittal.
- E. Manual: Bind in commercial quality 8-1/2 by 11 inch three D side ring binders with durable plastic covers.
- F. 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.
- G. 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.
- H. 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.

END OF SECTION

SECTION 02 4100

DEMOLITION

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Selective demolition of building elements for alteration purposes.

1.02 RELATED REQUIREMENTS

- A. Section 01 5000 - Temporary Facilities and Controls: Site fences, security, protective barriers, and waste removal.
- B. Section 01 7000 - Execution and Closeout Requirements: Project conditions; protection of bench marks, survey control points, and existing construction to remain; reinstallation of removed products; temporary bracing and shoring.

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; 2013.

PART 2 EXECUTION

2.01 SCOPE

- A. Remove items indicated on drawings.

2.02 GENERAL PROCEDURES AND PROJECT CONDITIONS

- A. Comply with other requirements specified in Section 01 7000.
- B. Comply with applicable codes and regulations for demolition operations and safety of adjacent structures and the public.
 - 1. Provide, erect, and maintain temporary barriers and security devices.
 - 2. Use physical barriers to prevent access to areas that could be hazardous to workers or the public.
 - 3. Conduct operations to minimize effects on and interference with adjacent structures and occupants.
 - 4. Do not close or obstruct roadways or sidewalks without permit.
 - 5. 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.
 - 6. 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 Owner.
- D. Do not begin removal until built elements to be salvaged or relocated have been removed.
- E. Protect existing structures and other elements that are not to be 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; do not use water if that will result in ice, flooding, sedimentation of public waterways or storm sewers, or other pollution.
- G. If hazardous materials are discovered during removal operations, stop work and notify Architect and Owner; hazardous materials include regulated asbestos containing materials, lead, PCB's, and mercury.

2.03 EXISTING UTILITIES

- A. Protect existing utilities to remain from damage.
- B. Do not disrupt public utilities without permit from authority having jurisdiction.

- C. Do not close, shut off, or disrupt existing life safety systems that are in use without at least 7 days prior written notification to Owner.
- D. 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 Owner.

2.04 SELECTIVE DEMOLITION FOR ALTERATIONS

- A. Drawings showing existing construction and utilities are based on casual field observation and existing record documents only.
 - 1. Verify that construction and utility arrangements are as shown.
 - 2. Report discrepancies to Architect 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 other areas that are still occupied.
 - 1. Provide, erect, and maintain temporary dustproof partitions of construction specified in Section 01 5000 in locations indicated on drawings.
- C. Remove existing work as indicated and as required to accomplish new work.
 - 1. Remove items indicated on drawings.
- D. Protect existing work to remain.
 - 1. Prevent movement of structure; provide shoring and bracing if necessary.
 - 2. Perform cutting to accomplish removals neatly and as specified for cutting new work.
 - 3. Repair adjacent construction and finishes damaged during removal work.
 - 4. Patch as specified for patching new work.

2.05 DEBRIS AND WASTE REMOVAL

- A. Remove debris, junk, and trash from site.
- B. Leave site in clean condition, ready for subsequent work.
- C. Clean up spillage and wind-blown debris from public and private lands.

END OF SECTION 02 4100

SECTION 03 3000
CAST-IN-PLACE CONCRETE

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Concrete formwork.
- B. Concrete reinforcement.
- C. Joint devices associated with concrete work.
- D. Concrete curing.

1.02 RELATED REQUIREMENTS

- A. Section 07 9200 - Joint Sealants: Products and installation for sealants for saw cut joints and isolation joints in slabs.
- B. Section 32 1313 - Concrete Paving: Sidewalks

1.03 REFERENCE STANDARDS

- A. ACI 117 - Standard Specifications for Tolerances for Concrete Construction and Materials; 2010.
- B. ACI 211.1 - Standard Practice for Selecting Proportions for Normal, Heavyweight, and Mass Concrete; 1991 (Reapproved 2009).
- C. ACI 301 - Specifications for Structural Concrete; 2010 (Errata 2012).
- D. ACI 302.1R - Guide for Concrete Floor and Slab Construction; 2004 (Errata 2007).
- E. ACI 304R - Guide for Measuring, Mixing, Transporting, and Placing Concrete; 2000.
- F. ACI 305R - Hot Weather Concreting; 2010.
- G. ACI 306R - Cold Weather Concreting; 2010.
- H. ACI 308R - Guide to Curing Concrete; 2001 (Reapproved 2008).
- I. ACI 318 - Building Code Requirements for Structural Concrete and Commentary; 2011.
- J. ASTM A615/A615M - Standard Specification for Deformed and Plain Carbon Steel Bars for Concrete Reinforcement; 2015.
- K. ASTM A775/A775M - Standard Specification for Epoxy-Coated Steel Reinforcing Bars; 2007b (Reapproved 2014).
- L. ASTM A1064/A1064M - Standard Specification for Carbon-Steel Wire and Welded Wire Reinforcement, Plain and Deformed, for Concrete; 2015.
- M. ASTM C33/C33M - Standard Specification for Concrete Aggregates; 2013.
- N. ASTM C39/C39M - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens; 2015a.
- O. ASTM C143/C143M - Standard Test Method for Slump of Hydraulic-Cement Concrete; 2012.
- P. ASTM C150/C150M - Standard Specification for Portland Cement; 2015.
- Q. ASTM C173/C173M - Standard Test Method for Air Content of Freshly Mixed Concrete by the Volumetric Method; 2014.
- R. ASTM C260/C260M - Standard Specification for Air-Entraining Admixtures for Concrete; 2010a.
- S. ASTM C494/C494M - Standard Specification for Chemical Admixtures for Concrete; 2013.
- T. ASTM C618 - Standard Specification for Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use in Concrete; 2015.

- U. ASTM C881/C881M - Standard Specification for Epoxy-Resin-Base Bonding Systems for Concrete; 2014.
- V. ASTM C1059/C1059M - Standard Specification for Latex Agents for Bonding Fresh to Hardened Concrete; 2013.
- W. ASTM C1240 - Standard Specification for Silica Fume Used in Cementitious Mixtures; 2014.
- X. ASTM D1752 - Standard Specification for Preformed Sponge Rubber Cork and Recycled PVC Expansion Joint Fillers for Concrete Paving and Structural Construction; 2004a (Reapproved 2013).
- Y. COE CRD-C 48 - Method of Test for Water Permeability of Concrete; 1992.
- Z. NSF 61 - Drinking Water System Components - Health Effects; 2014 (Errata 2015).
- AA. NSF 372 - Drinking Water System Components - Lead Content; 2011.

1.04 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Product Data: Submit manufacturers' data on manufactured products showing compliance with specified requirements and installation instructions.
 - 1. For curing compounds, provide data on method of removal in the event of incompatibility with floor covering adhesives.
- C. Mix Design: Submit proposed concrete mix design.
 - 1. Indicate proposed mix design complies with requirements of ACI 301, Section 4 - Concrete Mixtures.
 - 2. Indicate proposed mix design complies with requirements of ACI 318, Chapter 5 - Concrete Quality, Mixing and Placing.
- D. Project Record Documents: Accurately record actual locations of embedded utilities and components that will be concealed from view upon completion of concrete work.
- E. Warranty: Submit manufacturer warranty and ensure forms have been completed in Owner's name and registered with manufacturer.

1.05 QUALITY ASSURANCE

- A. Perform work of this section in accordance with ACI 301 and ACI 318.
 - 1. Maintain one copy of each document on site.
- B. Follow recommendations of ACI 305R when concreting during hot weather.
- C. Follow recommendations of ACI 306R when concreting during cold weather.

1.06 WARRANTY

- A. See Section 01 7800 - Closeout Submittals, for additional warranty requirements.

PART 2 PRODUCTS

2.01 FORMWORK

- A. Form Materials: Contractor's choice of standard products with sufficient strength to withstand hydrostatic head without distortion in excess of permitted tolerances.
 - 1. Form Coating: Release agent that will not adversely affect concrete or interfere with application of coatings.
 - 2. Form Ties: Cone snap type that will leave no metal within 1-1/2 inches of concrete surface.

2.02 REINFORCEMENT

- A. Reinforcing Steel: ASTM A615/A615M, Grade 60 (60,000 psi).
- B. Steel Welded Wire Reinforcement (WWR): Galvanized, plain type, ASTM A1064/A1064M.
- C. Reinforcement Accessories:
 - 1. Tie Wire: Annealed, minimum 16 gage, 0.0508 inch.

2.03 CONCRETE MATERIALS

- A. Cement: ASTM C150/C150M, Type I - Normal Portland type.
 - 1. Acquire all cement for entire project from same source.
- B. Fine and Coarse Aggregates: ASTM C 33.
 - 1. Acquire all aggregates for entire project from same source.
- C. Fly Ash: ASTM C618, Class F.
- D. Water: Clean and not detrimental to concrete.

2.04 ADMIXTURES

- A. Do not use chemicals that will result in soluble chloride ions in excess of 0.1 percent by weight of cement.
- B. Air Entrainment Admixture: ASTM C260/C260M.
- C. Accelerating Admixture: ASTM C494/C494M Type C.
 - 1. Manufacturers:
 - a. W.R. Meadows, Inc; Hydraset: www.wrmeadows.com.
 - b. Substitutions: See Section 01 6000 - Product Requirements.
- D. Waterproofing Admixture: Admixture formulated to reduce permeability to liquid water, with no adverse effect on concrete properties.
 - 1. Admixture Composition: Hydrophobic polymer waterproofing and corrosion inhibitor, functioning by closing concrete pores and chemical bonding.
 - 2. Permeability of Cured Concrete: No measurable leakage when tested in accordance with COE CRD-C 48 at 350 feet of head; provide test reports.
 - 3. Potable Water Contact Approval: NSF certification for use on structures holding potable water, based on testing in accordance with NSF 61 and NSF 372.

2.05 BONDING AND JOINTING PRODUCTS

- A. Latex Bonding Agent: Non-redispersable acrylic latex, complying with ASTM C1059/C1059M, Type II.
- B. Epoxy Bonding System:
 - 1. Complying with ASTM C881/C881M and of Type required for specific application.
- C. Slab Isolation Joint Filler: 1/2 inch thick, height equal to slab thickness, with removable top section that will form 1/2 inch deep sealant pocket after removal.
 - 1. Material: ASTM D1752 sponge rubber (Type I).
- D. Slab Construction Joint Devices: Combination keyed joint form and screed, galvanized steel, with minimum 1 inch diameter holes for conduit or rebars to pass through at 6 inches on center; ribbed steel stakes for setting.

2.06 CURING MATERIALS

- A. Curing and Sealing Compound, Low Gloss: Liquid, membrane-forming, clear, non-yellowing acrylic; complying with ASTM C1315 Type 1 Class A.
 - 1. Application: Use at all slabs.
 - 2. Vehicle: Solvent-based.
 - 3. Manufacturers:
 - a. Kaufman Products Inc.; Krystal 25: www.kaufmanproducts.net.
 - b. W.R. Meadows, Inc.; CS-309 OTC: www.wrmeadows.com.
 - c. Substitutions: See Section 01 6000 - Product Requirements.

2.07 CONCRETE MIX DESIGN

- A. Admixtures: Add acceptable admixtures as recommended in ACI 211.1 and at rates recommended or required by manufacturer.
- B. Normal Weight Concrete:
 - 1. Compressive Strength, when tested in accordance with ASTM C39/C39M at 28 days: 3,500 pounds per square inch.
 - 2. Fly Ash Content: Maximum 15 percent of cementitious materials by weight.
 - 3. Cement Content: Minimum 600 lb per cubic yard.
 - 6. Water-Cement Ratio: Maximum 40 percent by weight.
 - 7. Total Air Content: 4 percent, determined in accordance with ASTM C173/C173M.
 - 8. Maximum Slump: 3 inches.
 - 9. Maximum Aggregate Size: 5/8 inch.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify lines, levels, and dimensions before proceeding with work of this section.

3.02 PREPARATION

- A. Formwork: Comply with requirements of ACI 301. Design and fabricate forms to support all applied loads until concrete is cured, and for easy removal without damage to concrete.
- B. Verify that forms are clean and free of rust before applying release agent.
- C. Where new concrete is to be bonded to previously placed concrete, prepare existing surface by cleaning with steel brush and applying bonding agent in accordance with manufacturer's instructions.
 - 1. Use epoxy bonding system for bonding to damp surfaces, for structural load-bearing applications, and where curing under humid conditions is required.
 - 2. Use latex bonding agent only for non-load-bearing applications.

3.03 INSTALLING REINFORCEMENT AND OTHER EMBEDDED ITEMS

- A. Comply with requirements of ACI 301. Clean reinforcement of loose rust and mill scale, and accurately position, support, and secure in place to achieve not less than minimum concrete coverage required for protection.
- B. Install welded wire reinforcement in maximum possible lengths, and offset end laps in both directions. Splice laps with tie wire.

3.04 PLACING CONCRETE

- A. Place concrete in accordance with ACI 304R.
- B. Place concrete for floor slabs in accordance with ACI 302.1R.
- C. Ensure reinforcement, inserts, waterstops, embedded parts, and formed construction joint devices will not be disturbed during concrete placement.

3.05 SLAB JOINTING

- A. Locate joints to match spacing of existing joints, or as directed by architect.
- B. Anchor joint fillers and devices to prevent movement during concrete placement.
- C. Isolation Joints: Use preformed joint filler with removable top section for joint sealant, total height equal to thickness of slab, set flush with top of slab.
- D. Load Transfer Construction and Contraction Joints: Install load transfer devices as indicated; saw cut joint at surface as indicated for contraction joints.
- E. Saw Cut Contraction Joints: Saw cut joints before concrete begins to cool, within 4 to 12 hours after placing; use 3/16 inch thick blade and cut at least 1 inch deep but not less than one quarter (1/4) the depth of the slab.
- F. Construction Joints: Where not otherwise indicated, use metal combination screed and key form, with removable top section for joint sealant.

3.06 FLOOR FLATNESS AND LEVELNESS TOLERANCES

- A. Maximum Variation of Surface Flatness:
 - 1. Exposed Concrete Floors: 1/4 inch in 10 feet.
 - 2. Under Seamless Resilient Flooring: 1/4 inch in 10 feet.
 - 3. Under Carpeting: 1/4 inch in 10 feet.
- B. Correct the slab surface if tolerances are less than specified.
- C. Correct defects by grinding or by removal and replacement of the defective work. Areas requiring corrective work will be identified. Re-measure corrected areas by the same process.

3.07 CONCRETE FINISHING

- A. Repair surface defects, including tie holes, immediately after removing formwork.
- B. Concrete Slabs: Finish to requirements of ACI 302.1R, and as follows:
 - 1. Other Surfaces to Be Left Exposed: Trowel as described in ACI 302.1R, minimizing burnish marks and other appearance defects.

3.08 CURING AND PROTECTION

- A. Comply with requirements of ACI 308R. Immediately after placement, protect concrete from premature drying, excessively hot or cold temperatures, and mechanical injury.
- B. Maintain concrete with minimal moisture loss at relatively constant temperature for period necessary for hydration of cement and hardening of concrete.
- C. Surfaces Not in Contact with Forms:
 - 1. Initial Curing: Start as soon as free water has disappeared and before surface is dry. Keep continuously moist for not less than three days by water ponding, water-saturated sand, water-fog spray, or saturated burlap.
 - 2. Final Curing: Begin after initial curing but before surface is dry.

3.09 FIELD QUALITY CONTROL

- A. An independent testing agency will perform field quality control tests, as specified in Section 01 4000 - Quality Requirements.
- B. Provide free access to concrete operations at project site and cooperate with appointed firm.
- C. Compressive Strength Tests: ASTM C39/C39M. For each test, mold and cure three concrete test cylinders. Obtain test samples for every 100 cubic yards or less of each class of concrete placed.
- D. Take one additional test cylinder during cold weather concreting, cured on job site under same conditions as concrete it represents.
- E. Perform one slump test for each set of test cylinders taken, following procedures of ASTM C143/C143M.

3.10 DEFECTIVE CONCRETE

- A. Defective Concrete: Concrete not conforming to required lines, details, dimensions, tolerances or specified requirements.
- B. Repair or replacement of defective concrete will be determined by the Architect. The cost of additional testing shall be borne by Contractor when defective concrete is identified.
- C. Do not patch, fill, touch-up, repair, or replace exposed concrete except upon express direction of Architect for each individual area.

END OF SECTION

**SECTION 03 4100
PRECAST STRUCTURAL CONCRETE**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Lintels.

1.02 RELATED REQUIREMENTS

1.03 REFERENCE STANDARDS

- A. ACI CODE-318 - Building Code Requirements for Structural Concrete and Commentary; 2019 (Reapproved 2022).
- B. ASTM A615/A615M - Standard Specification for Deformed and Plain Carbon-Steel Bars for Concrete Reinforcement; 2022.
- C. PCI MNL-116 - Manual for Quality Control for Plants and Production of Structural Precast Concrete Products; 2021.
- D. PCI MNL-135 - Tolerance Manual for Precast and Prestressed Concrete Construction; 2000.

1.04 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Product Data: Indicate standard component configurations, design loads, deflections, cambers, and bearing requirements.
- C. Shop Drawings: Indicate layout, unit locations, fabrication details, unit identification marks, reinforcement, integral insulation, insulated panel system connectors, connection details, support items, dimensions, openings, and relationship to adjacent materials. Indicate design loads, deflections, cambers, bearing requirements, and special conditions.
- D. Design Data: Submit design data reports indicating calculations for loadings and stresses of fabricated, designed framing.

1.05 QUALITY ASSURANCE

- A. Designer Qualifications: Design precast concrete members under direct supervision of a Professional Structural Engineer experienced in design of precast concrete and licensed in the State in which the Project is located.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Handle precast members in position consistent with their shape and design. Lift and support only from support points.
- B. Mark each member with date of production and final position in structure.

PART 2 PRODUCTS

2.01 MANUFACTURERS

2.02 PRECAST UNITS

- A. Precast Structural Concrete Units: Lintels; match existing sizes, field verify. Comply with PCI MNL-116, PCI MNL-120, PCI MNL-123, PCI MNL-135, ACI CODE-318, and applicable codes.
 - 1. Design components to withstand dead loads and design loads in the configuration indicated on drawings and as follows:
 - 2. Calculate structural properties of framing members in accordance with ACI CODE-318.
 - 3. Design system to accommodate construction tolerances, deflection of other building structural members and clearances of intended openings.

2.03 MATERIALS

2.04 REINFORCEMENT

- A. Reinforcing Steel: ASTM A615/A615M, Grade 40 (40,000 psi) (280 MPa).

2.05 FABRICATION

- A. Comply with fabrication procedures specified in PCI MNL-116.

2.06 FABRICATION TOLERANCES

- A. Comply with fabrication tolerances specified in PCI MNL-135, except as specifically amended below.
 - 1. Variation From Nominal Dimension: Plus or minus 1/2 inch (12.5 mm).
 - 2. Variation From Intended Camber: Plus or minus 1/4 in per 10 ft (6 mm per 3 m), plus or minus 5/8 inch (15 mm) maximum.
 - 3. Variation from End Squareness: Plus or minus 1/8 inch/12 in (3 mm/300 mm), maximum 3/8 in (9 mm).

2.07 FINISHES

- A. Ensure exposed-to-view finish surfaces of precast concrete members are uniform in color and appearance.
- B. Cure members under identical conditions to develop required concrete quality, and minimize appearance blemishes such as non-uniformity, staining, or surface cracking.
- C. Architectural Finish (Finish ___): Surface holes or bubbles over 1/4 inch (6 mm) filled with matching cementitious paste, fins or protrusions removed and surface ground smooth.

2.08 SOURCE QUALITY CONTROL

- A. Section 01 4000 - Quality Requirements: Provide mix design for concrete.
- B. Test samples in accordance with applicable ASTM standard.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that site conditions are ready to receive work and field measurements are as indicated on shop drawings.

3.02 PREPARATION

- A. Prepare support equipment for the erection procedure, temporary bracing, and induced loads during erection.

3.03 ERECTION

- A. Erect members without damage to structural capacity, shape, or finish. Replace or repair damaged members.
- B. Grout underside of column bearing plates.

3.04 TOLERANCES

- A. Erect members level and plumb within allowable tolerances.

3.05 PROTECTION

- A. Protect members from damage caused by field welding or erection operations.

END OF SECTION

SECTION 04 0100
MAINTENANCE OF MASONRY

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Water and Chemical cleaning of Brick Masonry surfaces.
- B. Replacement of brick masonry units.
- C. Repointing mortar joints.
- D. Repair of damaged masonry.

1.02 RELATED REQUIREMENTS

- A. Section 04 0511 - Masonry Mortaring and Grouting.
- B. Section 04 2000 - Unit Masonry: Brick masonry units.
- C. Section 07 1900 - Water Repellants

1.03 REFERENCE STANDARDS

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

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.

1.05 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide data on cleaning compounds.

1.06 MOCK-UPS

- A. Restore and repoint an existing masonry wall area sized 8 feet (2.40 m) long by 6 feet (2 m) high; include in mock-up area instances of mortar, accessories, wall openings, and flashings.
- B. Clean a 10 ft (3 m) by 10 ft (3 m) panel of wall to determine extent of cleaning.
- C. Locate where directed.
- D. Acceptable panel and procedures employed will become the standard for work of this section.
- E. Mock-up may remain as part of the Work.

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.

1.08 WARRANTY

- A. See Section 01 7800 - Closeout Submittals for additional warranty requirements.
- B. Warranty: Provide 5-year warranty for CFRP system design, installation, bond to the substrate, and interlaminar bond, as well as mechanical property retention and fabric-resin compatibility,

commencing on Date of Substantial Completion. Complete forms in Owner's name and register with warrantor.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Restoration and Cleaning Chemicals:
 - 1. Diedrich Technologies, Inc; www.diedrichtechnologies.com/#sle.
 - 2. HMK Stone Care System; www.hmkstonecare.com/#sle.
 - 3. PROSOCO; www.prosoco.com/#sle.
 - 4. Substitutions: See Section 01 6000 - Product Requirements.

2.02 CLEANING MATERIALS

- A. Cleaning Agent: Detergent type.
- B. Cleaning Agent: 0.5 lb (227 g) of sodium hydrosulphite mixture to one gallon (3.8 L) of water.

2.03 MORTAR MATERIALS

- A. Comply with requirements of Section 04 0511.

2.04 MASONRY MATERIALS

- A. Brick: Section 04 2000.

PART 3 EXECUTION

3.01 EXAMINATION

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

3.02 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. Cover existing landscaping with tarpaulins or similar covers.
- E. Mask immediately adjacent surfaces with material that will withstand cleaning and restoration procedures.
- F. Protect roof membrane and flashings from damage with 1/2 inch (13 mm) plywood laid on roof surfaces over full extent of work area and traffic route.
- G. When using cleaning methods that involve water or other liquids, install drainage devices to prevent runoff over adjacent surfaces unless those surfaces are impervious to damage from runoff.
- H. Do not allow cleaning runoff to drain into sanitary or storm sewers.

3.03 REBUILDING

- A. Cut out damaged and deteriorated 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 mortar as directed.

- D. Mortar Mix: Colored and proportioned to match existing work.
- E. 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.

3.04 REPOINTING

- A. Perform repointing prior to cleaning masonry surfaces.
- B. Cut out loose or disintegrated mortar in joints to minimum 1/2 inch (6 mm) depth or until sound mortar is reached.
- C. Use power tools only after test cuts determine no damage to masonry units will result.
- D. Do not damage masonry units.
- E. When cutting is complete, remove dust and loose material by brushing.
- F. Premoisten joint and apply mortar. Pack tightly in maximum 1/4 inch (6 mm) layers. Form a smooth, compact concave joint to match existing.
- G. Moist cure for 72 hours.

3.05 CLEANING EXISTING MASONRY

- A. Cleaning Detergent: Brush clean masonry surfaces with cleaning agent in accordance with the manufacturer's instructions. Saturate masonry with clean water and flush loose mortar and dirt.

3.06 CLEANING NEW MASONRY

- A. Verify mortar is fully set and cured.
- B. Clean surfaces and remove large particles with wood scrapers, brass or nylon wire brushes.
- C. Scrub walls with cleaning agent solution using stiff brush. Thoroughly rinse and wash off cleaning solution, dirt and mortar crumbs using clean, pressurized water.

3.07 RESTORATION CLEANING

- A. Clean surfaces and remove large particles with wood scrapers or non-ferrous wire brush.
- B. Spray or Brush coat masonry with _____ restoration cleaner, mixed into solution in accordance with manufacturer's instructions.
- C. Provide a second application if required to match mock-up area.
- D. Allow sufficient time for solution to remain on masonry and agitate with soft fiber brush or sponge.
- E. Rinse from the bottom up with potable water applied at 400 psi (2 750 kPa) and at a rate of 4 gal/min (16 L/min).

3.08 AGING

- A. Rub in new masonry work to match, as close as possible, adjacent original work.
- B. After each application, dust off surplus and wash down with low pressure hose. Allow surface to dry before proceeding with succeeding applications.
- C. Continue process until acceptance.

3.09 CLEANING

- A. Immediately remove stains, efflorescence, or other excess resulting from the work of this section.
- B. Remove excess mortar, smears, and droppings as work proceeds and upon completion.
- C. Clean surrounding surfaces.

END OF SECTION

SECTION 04 0511
MORTAR AND MASONRY GROUT

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Mortar for masonry.

1.02 RELATED REQUIREMENTS

- A. Section 04 0100 - Maintenance of Masonry: Bedding and pointing mortar for masonry restoration work.

1.03 REFERENCE STANDARDS

- A. TMS 402/602 - Building Code Requirements and Specification for Masonry Structures; 2016.
- B. ASTM C5 - Standard Specification for Quicklime for Structural Purposes; 2018.
- C. ASTM C91/C91M - Standard Specification for Masonry Cement; 2018.
- D. ASTM C144 - Standard Specification for Aggregate for Masonry Mortar; 2018.
- E. ASTM C150/C150M - Standard Specification for Portland Cement; 2020.
- F. ASTM C207 - Standard Specification for Hydrated Lime for Masonry Purposes; 2018.
- G. ASTM C270 - Standard Specification for Mortar for Unit Masonry; 2019.
- H. ASTM C387/C387M - Standard Specification for Packaged, Dry, Combined Materials for Concrete and High Strength Mortar; 2017.
- I. ASTM C780 - Standard Test Method for Preconstruction and Construction Evaluation of Mortars for Plain and Reinforced Unit Masonry; 2020.

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. Also include required environmental conditions and admixture limitations.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Maintain packaged materials clean, dry, and protected against dampness, freezing, and foreign matter.

1.06 FIELD CONDITIONS

- 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 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 Mix Designs: ASTM C270, Property Specification.
 - 1. Exterior Repointing Mortar: Type N with maximum 2 percent ammonium stearate or calcium stearate per cement weight.

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: Type N.
 - 2. Color: Match Existing. Provide mock-up. Color must be approved by owner and architect before proceeding..

- B. Portland Cement: ASTM C150/C150M.
 - 1. Type: Type I - Normal; ASTM C150/C150M.
 - 2. Color: Match Existing.
- C. Masonry Cement: ASTM C91/C91M.
 - 1. Type: Type N; ASTM C91/C91M.
 - 2. Colored Mortar: Premixed cement as required to match Architect's color sample.
- D. Hydrated Lime: ASTM C207, Type S.
- E. Quicklime: ASTM C5, non-hydraulic type.
- F. Mortar Aggregate: ASTM C144.
- G. Water: Clean and potable.
- H. Bonding Agent: Latex type.

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. Do not use anti-freeze compounds to lower the freezing point of mortar.
- D. If water is lost by evaporation, re-temper only within two hours of mixing.

PART 3 EXECUTION

3.01 PREPARATION

- A. Apply bonding agent to existing concrete surfaces.

3.02 INSTALLATION

- A. Install mortar to requirements of section(s) in which masonry is specified.

3.03 FIELD QUALITY CONTROL

- A. An independent testing agency will perform field tests, in accordance with provisions of Section 01 4000 - Quality Requirements.
- B. Test and evaluate mortar in accordance with ASTM C780 procedures.

END OF SECTION

SECTION 04 2000
UNIT MASONRY

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Face Brick.
- B. Accessories

1.02 RELATED SECTIONS

- A. Section 04 0511 - Mortar and Masonry grout: Mortar and masonry grout.

1.03 SUBMITTALS

- A. Provide sample of each type of face brick unit, and masonry accessories.
- B. Provide catalog data for wall ties, anchors, reinforcing, and accessories.
- C. Submit color samples.

1.04 MOCK-UP

- A. Provide a sample area on one selected building as requested by the Architect for approval, showing the face brick chosen by Owner/Architect, showing colors and textures, mortar colors, type and size of joints, for typical brick replacement condition.
- B. Approved areas will be used as basis for judging the quality of masonry work on this project. Any work of lesser quality will be rejected.
- C. Sample areas if approved, may remain in place as approved completed work.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Upon delivery to the site, pile masonry units free of the ground and protect from weather by tarpaulins or other suitable and approved means.
- B. Properly handle masonry units to prevent spalling, chipping and other damage. Protect face brick with straw during transportation and storage on the job site.

1.06 ENVIRONMENTAL REQUIREMENTS

- A. Do not erect masonry when sun, heat, wind, or limitations of Contractor's facilities prevent proper setting and curing, or obtaining of proper bond.
- B. Do not lay units having a surface film of water or frost.
- C. Do not erect masonry during freezing weather or when it appears probable that freezing weather will be encountered before the mortar has set, unless, subject to written approval, suitable precautionary measures are taken. When masonry work is authorized by the Engineer during cold temperatures, special protective provisions as follows must be provided.
- D. When the outside air temperature is between 35 degrees F and 32 degrees F, keep masonry units completely covered and constantly free from ice and snow. The mixing water or sand shall be heated not to exceed 160 degrees F or under 70 degrees F. Maintain the air temperature on both sides of the masonry above 40 degrees F for a period of at least seventy-two (72) hours. Submit for approval, the methods proposed for use in protecting the masonry against low temperatures. Building upon frozen work is prohibited.
- E. When the outside air temperature is between 32 degrees F and 25 degrees F, in addition to requirements noted above, heat the mixing water and sand not to exceed 160 degrees F or under 70 degrees F.
- F. When the outside temperature is between 25 degrees F and 18 degrees F, in addition to the requirements above, add calcium chloride to the mixing water at a rate not to exceed 1-1/2 to 2 pounds per sack of Portland cement. Do not add calcium chloride to masonry cement mortars unless specifically recommended by the manufacturer of the masonry cement. When the

outside temperature is between 18 degrees F and 0 degrees F, in addition to the provisions above, heat hollow masonry units, when laid, to at least 40 degrees F.

- G. When the outside air temperature is 0 degrees F and below, perform masonry work only in an emergency. In addition to the provisions above, heat solid masonry units to a temperature above 40 degrees F immediately before laying. Provide complete temporary enclosures for masonry construction during sustained sub-zero weather.
- H. Thoroughly drench with water, masonry having an absorbent coefficient of more than five percent, if laid when the temperature is more than fifty (50) degrees F.

PART 2 PRODUCTS

2.01 MATERIALS – FACE BRICK

- A. Face brick to match existing as approved by the Architect and Owner.
 - 1. ASTM Standard Specification: C216.
 - 2. Grade: Match Existing.
 - 3. Type: FB, FACE BRICK.
 - 4. Size: Match Existing – field verify.
 - 5. Surface Texture: Match Existing – field verify.
 - 6. Quantity and availability shall be confirmed prior to bidding. If specified brick is unavailable at time of installation, alternate brick shall be selected from manufacturers full range of colors and textures. Owner shall determine final product selection.
- B. Provide mortar netting at base of cavity wall and all other flashing locations. Mortar netting shall be Mortar-Break polymer core geomatrix composed of nylon strands woven into a .875" thick mesh, as manufactured by Advanced Building Products, Inc. and installed according to manufactures instructions.

2.02 REINFORCEMENT AND ANCHORAGE

- A. Manufacturers of Joint Reinforcement and Anchors:
 - 1. Dur-O-Wal: www.dur-o-wal.com.
 - 2. Hohmann & Barnard, Inc: www.h-b.com.
 - 3. Masonry Reinforcing Corporation of America: www.wirebond.com.
 - 4. Heckmann Building Products, Inc. www.heckmannbuildingprods.com.
 - 5. Substitutions: See Section 01600 - Product Requirements.
- B. Reinforcing Steel: Type specified in Section 03200; size as indicated on drawings; galvanized finish.
- C. Single Wythe Joint Reinforcement: Truss type; ASTM A 82/A 82M steel wire, hot dip galvanized after fabrication to ASTM A 153/A 153M, Class B; 0.1483 inch side rods with 0.1483 inch cross rods; width as required to provide not more than 1 inch and not less than 1/2 inch of mortar coverage on each exposure.
- D. Multiple Wythe Joint Reinforcement: Truss type; fabricated with moisture drip; ASTM A 82/A 82M steel wire, hot dip galvanized after fabrication to ASTM A 153/153M, Class B; 0.1483 inch side rods with 0.1483 inch cross rods; width as required to provide not more than 1 inch and not less than 1/2 inch of mortar coverage on each exposure.
- E. Adjustable Multiple Wythe Joint Reinforcement: Truss type with adjustable ties or tabs spaced at 16 in on center and fabricated with moisture drip; ASTM A 82/A 82M steel wire, hot dip galvanized after fabrication to ASTM A 153/153M, Class B; 0.1875 inch side rods with 0.1483 inch cross rods and adjustable components of 0.1875 inch wire; width of components as required to provide not more than 1 inch and not less than 1/2 inch of mortar coverage from each masonry face.
 - 1. Vertical adjustment: Not less than 2 inches.
 - 2. Insulation Clips: Provide clips at tabs or ties designed to secure insulation against outer face of inner wythe of masonry.

- F. Two-Piece Wall Ties: Formed steel wire, 0.1875 inch thick, adjustable, eye and pintle type, hot dip galvanized to ASTM A 153/A 153M, Class B, sized to provide not more than 1 inch and not less than 1/2 inch of mortar coverage from masonry face and to allow vertical adjustment of up to 1-1/4 in.

2.03 FLASHING

- A. Plastic/Kraft Paper Flashings: 50 - 65 mils thick sheet polyethylene bonded to layer of fiber reinforced asphalt and backed with Kraft paper.
- B. Rubberized Asphalt Flashing: Self-adhering polymer-modified asphalt sheet; 0.040 inch total thickness; with cross-linked polyethylene top and bottom surfaces.
 - 1. Manufacturers:
 - a. Carlisle; Product CCW-705-TWF.
 - b. Substitutions: See Section 01600 - Product Requirements.

2.04 ACCESSORIES

- A. Preformed Control Joints: Rubber material. Provide with corner and tee accessories, fused joints.
 - 1. Manufacturers:
 - a. Dur-O-Wal: www.dur-o-wal.com.
 - b. Hohmann & Barnard, Inc: www.h-b.com.
 - c. Substitutions: See Section 01600 - Product Requirements.
- B. Joint Filler: Closed cell polyvinyl chloride; oversized 50 percent to joint width; self expanding; width as required by maximum lengths available.
 - 1. Manufacturers:
 - a. Dur-O-Wal: www.dur-o-wal.com.
 - b. Hohmann & Barnard, Inc: www.h-b.com.
 - c. Substitutions: See Section 01600 - Product Requirements.
- C. Cavity Mortar Control: Semi-rigid polyethylene or polyester mesh panels, sized to thickness of wall cavity, and designed to prevent mortar droppings from clogging weeps and cavity vents and allow proper cavity drainage.
 - 1. Mortar Diverter: Panels designed for installation at flashing locations.
 - a. Manufacturers:
 - 1) Advanced Building Products Inc: www.advancedflashing.com.
 - 2) Mortar Net USA, Ltd: www.mortarnet.com.
 - 3) Substitutions: See Section 01600 - Product Requirements.
- D. Weeps: Polypropylene Vents.
 - 1. Manufacturers:
 - a. Dur-O-Wal: www.dur-o-wal.com.
 - b. Hohmann & Barnard, Inc; Product Quadro-Vent: www.h-b.com. Basis of design.
 - c. Substitutions: See Section 01600 - Product Requirements.
 - 2. Size: Standard 3/8 x 2-1/2 x 3-3/8 inch.
 - 3. Size: Standard 3/8 x 2-1/2 x 3-3/8 inch.
- E. Cleaning Solution: Non-acidic, not harmful to masonry work or adjacent materials.
 - 1. Manufacturers:
 - a. Prosoco: www.prosoco.com
 - b. Substitutions: See Section 01600 - Product Requirements.

PART 3 EXECUTION

3.01 INSTALLATION

- A. Lay walls uniformly, in layers one scaffold high, around entire building. Lay work accurately to dimensions, carried up plumb, with horizontal joints level and laid to a line. Accurately space courses with each course breaking joints with course below unless otherwise indicated. Keep horizontal and vertical joints uniform, approximately 3/8".

- B. Keep bond pattern for masonry work plumb throughout. Keep corners and reveals plumb and true. Keep corners, both internal and external, square. At door and window jambs, and at other built-in items, grout voids solid with mortar mixed to pouring consistency.
- C. Use no pieces of brick less than 4" in length without specific approval. Make cuts neat and true, using power driven saw for cuts. Use no pieces with broken corners, chipped edges, or other defects in areas exposed to view as finish surfaces.
- D. Lay units in full mortar bed, including shell and webbing, and fill vertical joints completely.
- E. Form smooth concave compacted joints in exposed areas. Control joints shall be raked out 3/4" and left ready for caulking.
- F. Build in, as work progresses, inserts, collars, sleeves, anchors, plates, flashings, lintels, frames, conduits, pipes, and other accessories required to be built in masonry. These items will be furnished under other sections, or separate contracts, and the appropriate trades will designate correct locations and direct their installation.

3.02 CLEANING

- A. At completion of work, fill holes in joints of exposed exterior masonry surfaces with mortar, and tool suitably. After pointing has hardened, wet exposed clay-brick masonry surfaces. Then clean with solution of commercial detergent such as Sure-Klean or approved equal, applied with stiff fiber brushes. Immediately after cleaning, rinse thoroughly with clean water. Leave clean, free of mortar daubs, and with tight mortar joints throughout. When cleaning masonry, protect other work against damage or disfigurement.
- B. If the completed brick work produces efflorescence, remove it on exposed surfaces and prevent its recurrence with a spray-on water repellent for a period of one year from date of final acceptance of the project.

3.03 PROTECTION

- A. Constantly protect surfaces of finished masonry work during the construction period. At such time when rain or snow is imminent and work is discontinued, cover tops of exposed masonry with strong waterproof membranes well secured in place. Protect installed masonry work from rain splashing mud onto the brick near grade. Protection shall be adequate to prevent staining of brick.

END OF SECTION

SECTION 05 1200
STRUCTURAL STEEL FRAMING

PART 1 - GENERAL

1.01 SUMMARY

- A. Section Includes:
 - 1. Structural steel.
 - 2. Grout.

1.02 DEFINITIONS

- A. Structural Steel: Elements of the structural frame indicated on Drawings and as described in AISC 303, "Code of Standard Practice for Steel Buildings and Bridges."

1.03 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

1.04 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: Show fabrication of structural-steel components.

1.05 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer, fabricator, and testing agency.
- B. Welding certificates.
- C. Mill test reports for structural steel, including chemical and physical properties.
- D. Source quality-control reports.
- E. Field quality-control and special inspection reports.

1.06 QUALITY ASSURANCE

- A. Fabricator Qualifications: A qualified fabricator that participates in the AISC Quality Certification Program and is designated an AISC-Certified Plant, Category STD.
- B. Installer Qualifications: A qualified installer who participates in the AISC Quality Certification Program and is designated an AISC-Certified Erector, Category CSE.
- C. Welding Qualifications: Qualify procedures and personnel according to AWS D1.1/D1.1M, "Structural Welding Code - Steel."
- D. Comply with applicable provisions of the following specifications and documents:
 - 1. AISC 303.
 - 2. AISC 360.
 - 3. RCSC's "Specification for Structural Joints Using ASTM A325 or A 490 Bolts."

PART 2 - PRODUCTS

2.01 PERFORMANCE REQUIREMENTS

- A. Connections: Provide details of simple shear connections required by the Contract Documents to be selected or completed by structural-steel fabricator to withstand loads indicated and comply with other information and restrictions indicated.
 - 1. Select and complete connections using schematic details indicated and AISC 360.
 - 2. Use Load and Resistance Factor Design; data are given at factored-load level.

2.02 STRUCTURAL-STEEL MATERIALS

- A. Channels, Angles, and other-Shapes: ASTM A36/A36M.
- B. Plate and Bar: ASTM A36/A36M.
- C. Cold-Formed Hollow Structural Sections: ASTM A500/A500M, Grade B, structural tubing.
- D. Welding Electrodes: Comply with AWS requirements.

2.03 BOLTS, CONNECTORS, AND ANCHORS

- A. High-Strength Bolts, Nuts, and Washers: ASTM F3125/F3125M, Grade A325 (Grade A325M), Type 1, heavy-hex steel structural bolts; ASTM A563, Grade DH (ASTM A563M, Class 10S), heavy-hex carbon-steel nuts; and ASTM F436/F436M, Type 1, hardened carbon-steel washers; all with plain finish.
 - 1. Direct-Tension Indicators: ASTM F959/F959M, Type 325-1 (Type 8.8-1), compressible-washer type with plain finish.
- B. Unheaded Anchor Rods: ASTM F1554, Grade 36, straight.
 - 1. Finish: Plain.
- C. Threaded Rods: ASTM A36/A36M.
 - 1. Finish: Plain.

2.04 PRIMER

- A. Primer: Fabricator's standard lead- and chromate-free, nonasphaltic, rust-inhibiting primer complying with MPI#79 and compatible with topcoat.

2.05 GROUT

- A. Nonmetallic, Shrinkage-Resistant Grout: ASTM C1107/C1107M, factory-packaged, nonmetallic aggregate grout, noncorrosive and nonstaining, mixed with water to consistency suitable for application and a 30-minute working time.

2.06 FABRICATION

- A. Structural Steel: Fabricate and assemble in shop to greatest extent possible. Fabricate according to AISC 303, "Code of Standard Practice for Steel Buildings and Bridges," and to AISC 360.

2.07 SHOP CONNECTIONS

- A. High-Strength Bolts: Shop install high-strength bolts according to RCSC's "Specification for Structural Joints Using ASTM A325 or A 490 Bolts" for type of bolt and type of joint specified.
 - 1. Joint Type: Snug tightened.
- B. Weld Connections: Comply with AWS D1.1/D1.1M for tolerances, appearances, welding procedure specifications, weld quality, and methods used in correcting welding work.

2.08 SHOP PRIMING

- A. Shop prime steel surfaces except the following:
 - 1. Surfaces embedded in concrete or mortar. Extend priming of partially embedded members to a depth of 2 inches (50 mm).
 - 2. Surfaces to be field welded.
 - 3. Surfaces of high-strength bolted, slip-critical connections.
 - 4. Surfaces to receive sprayed fire-resistive materials (applied fireproofing).
 - 5. Galvanized surfaces.
 - 6. Surfaces enclosed in interior construction.
- B. Surface Preparation: Clean surfaces to be painted. Remove loose rust and mill scale and spatter, slag, or flux deposits. Prepare surfaces according to the following specifications and standards:
 - 1. SSPC-SP 2, "Hand Tool Cleaning."
 - 2. SSPC-SP 3, "Power Tool Cleaning."
 - 3. SSPC-SP 7/NACE No. 4, "Brush-off Blast Cleaning."
- C. Priming: Immediately after surface preparation, apply primer according to manufacturer's written instructions and at rate recommended by SSPC to provide a minimum dry film thickness of 1.5 mils (0.038 mm). Use priming methods that result in full coverage of joints, corners, edges, and exposed surfaces.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Verify, with certified steel erector present, elevations of concrete- and masonry-bearing surfaces and locations of anchor rods, bearing plates, and other embedments for compliance with requirements.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.02 ERECTION

- A. Set structural steel accurately in locations and to elevations indicated and according to AISC 303 and AISC 360.
- B. Baseplates Bearing Plates and Leveling Plates: Clean concrete- and masonry-bearing surfaces of bond-reducing materials, and roughen surfaces prior to setting plates. Clean bottom surface of plates.
 - 1. Set plates for structural members on setting nuts as required.
 - 2. Weld plate washers to top of baseplate.
 - 3. Snug-tighten anchor rods after supported members have been positioned and plumbed. Do not remove wedges or shims but, if protruding, cut off flush with edge of plate before packing with grout.
 - 4. Promptly pack grout solidly between bearing surfaces and plates so no voids remain. Neatly finish exposed surfaces; protect grout and allow to cure. Comply with manufacturer's written installation instructions for shrinkage-resistant grouts.
- C. Maintain erection tolerances of structural steel within AISC 303, "Code of Standard Practice for Steel Buildings and Bridges."

3.03 FIELD CONNECTIONS

- A. High-Strength Bolts: Install high-strength bolts according to RCSC's "Specification for Structural Joints Using ASTM A325 or A 490 Bolts" for type of bolt and type of joint specified.
 - 1. Joint Type: Snug tightened.
- B. Weld Connections: Comply with AWS D1.1/D1.1M for tolerances, appearances, welding procedure specifications, weld quality, and methods used in correcting welding work.
 - 1. Comply with AISC 303 and AISC 360 for bearing, alignment, adequacy of temporary connections, and removal of paint on surfaces adjacent to field welds.
 - 2. Remove backing bars or runoff tabs, back gouge, and grind steel smooth.
 - 3. Assemble and weld built-up sections by methods that maintain true alignment of axes without exceeding tolerances in AISC 303, "Code of Standard Practice for Steel Buildings and Bridges," for mill material.

3.04 FIELD QUALITY CONTROL

- A. Special Inspections: Owner will engage a qualified special inspector to perform the following special inspections:
 - 1. Verify structural-steel materials and inspect steel frame joint details.
 - 2. Verify weld materials and inspect welds.
 - 3. Verify connection materials and inspect high-strength bolted connections.
- B. Testing Agency: Owner will engage a qualified testing agency to perform tests and inspections.
- C. Bolted Connections: Inspect bolted connections according to RCSC's "Specification for Structural Joints Using ASTM A325 or A 490 Bolts."
- D. Welded Connections: Visually inspect field welds according to AWS D1.1/D1.1M.
 - 1. In addition to visual inspection, test and inspect field welds according to AWS D1.1/D1.1M and the following inspection procedures, at testing agency's option:
 - a. Liquid Penetrant Inspection: ASTM E165.
 - b. Magnetic Particle Inspection: ASTM E709; performed on root pass and on finished weld. Cracks or zones of incomplete fusion or penetration are not accepted.

- c. Ultrasonic Inspection: ASTM E164.
- d. Radiographic Inspection: ASTM E94.

END OF SECTION

SECTION 05 5213
PIPE AND TUBE RAILINGS

PART 1 GENERAL

1.01 RELATED REQUIREMENTS

- A. Section 09 9123 Painting

1.02 REFERENCE STANDARDS

- A. ADA Standards - Americans with Disabilities Act (ADA) Standards for Accessible Design; 2010.
- B. ASTM B241/B241M - Standard Specification for Aluminum and Aluminum-Alloy Seamless Pipe and Seamless Extruded Tube; 2012.
- C. ASTM B429/B429M - Standard Specification for Aluminum-Alloy Extruded Structural Pipe and Tube; 2010.
- D. ASTM B483/B483M - Standard Specification for Aluminum and Aluminum-Alloy Drawn Tubes for General Purpose Applications; 2013.
- E. ASTM E985 - Standard Specification for Permanent Metal Railing Systems and Rails for Buildings; 2000 (Reapproved 2006).

PART 2 PRODUCTS

2.01 RAILINGS - GENERAL REQUIREMENTS

- A. Design, fabricate, and test railing assemblies in accordance with the most stringent requirements of ASTM E985 and applicable local code.
- B. Allow for expansion and contraction of members and building movement without damage to connections or members.
- C. Dimensions: See drawings for configurations and heights.
- D. Provide anchors and other components as required to attach to structure, made of same materials as railing components unless otherwise indicated; where exposed fasteners are unavoidable provide flush countersunk fasteners.
- E. Provide slip-on non-weld mechanical fittings to join lengths, seal open ends, and conceal exposed mounting bolts and nuts, including but not limited to elbows, T-shapes, splice connectors, flanges, escutcheons, and wall brackets.
- F. Provide 3/4" powder coated aluminum balusters set into wood top rail and bottom rail for the stair handrails at the one and two bedroom apartments as indicated on the drawings.

2.02 ALUMINUM MATERIALS

- A. Aluminum Pipe: Schedule 40; ASTM B429/B429M, ASTM B241/B241M, or ASTM B483/B483M.
- B. Aluminum Balusters: 18-gauge wall thickness, gray powder coated to match existing, 32" length or as required to fit handrails as indicated on drawings.

2.03 FABRICATION

- A. Accurately form components to suit specific project conditions and for proper connection to building structure.
- B. Fit and shop assemble components in largest practical sizes for delivery to site.
- C. Fabricate components with joints tightly fitted and secured. Provide spigots and sleeves to accommodate site assembly and installation.

2.04 ALUMINUM FINISHES

- A. Color: To be selected by Architect from manufacturer's standard line.

PART 3 EXECUTION

3.01 PREPARATION

- A. Apply one coat of bituminous paint to concealed aluminum surfaces that will be in contact with cementitious or dissimilar materials.

3.02 INSTALLATION

- A. Install in accordance with manufacturer's instructions.
- B. Install components plumb and level, accurately fitted, free from distortion or defects, with tight joints.
- C. Install railings in compliance with ADA Standards for accessible design at applicable locations.
- D. Anchor railings securely to structure.

END OF SECTION

**SECTION 06 1000
ROUGH CARPENTRY**

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

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

1.02 SUMMARY

- A. Section Includes:
 - 1. Framing with dimension lumber.
 - 2. Wood blocking and nailers.
- B. Related Requirements:
 - 1. Section 06 7300 Composite Decking

1.03 DEFINITIONS

- A. Boards or Strips: Lumber of less than 2 inches nominal (38 mm actual) size in least dimension.
- B. Dimension Lumber: Lumber of 2 inches nominal (38 mm actual) size or greater but less than 5 inches nominal (114 mm actual) size in least dimension.
- C. Exposed Framing: Framing not concealed by other construction.

1.04 ACTION SUBMITTALS

- A. Product Data: For each type of process and factory-fabricated product. Indicate component materials and dimensions and include construction and application details.
 - 1. Include data for wood-preservative treatment from chemical treatment manufacturer and certification by treating plant that treated materials comply with requirements. Indicate type of preservative used and net amount of preservative retained.
 - 2. For products receiving a waterborne treatment, include statement that moisture content of treated materials was reduced to levels specified before shipment to Project site.

1.05 INFORMATIONAL SUBMITTALS

- A. Material Certificates: For dimension lumber specified to comply with minimum allowable unit stresses. Indicate species and grade selected for each use and design values approved by the ALSC Board of Review.
- B. Evaluation Reports: For the following, from ICC-ES:
 - 1. Wood-preservative-treated wood.
 - 2. Power-driven fasteners.
 - 3. Post-installed anchors.
 - 4. Metal framing anchors.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Stack wood products flat with spacers beneath and between each bundle to provide air circulation. Protect wood products from weather by covering with waterproof sheeting, securely anchored. Provide for air circulation around stacks and under coverings.

PART 2 - PRODUCTS

2.01 WOOD PRODUCTS, GENERAL

- A. Lumber: DOC PS 20 and applicable rules of grading agencies indicated. If no grading agency is indicated, comply with the applicable rules of any rules-writing agency certified by the ALSC Board of Review. Grade lumber by an agency certified by the ALSC Board of Review to inspect and grade lumber under the rules indicated.
 - 1. Factory mark each piece of lumber with grade stamp of grading agency.
 - 2. For exposed lumber indicated to receive a stained or natural finish, mark grade stamp on end or back of each piece.
 - 3. Dress lumber, S4S, unless otherwise indicated.
- B. Maximum Moisture Content of Lumber: 19 percent unless otherwise indicated.

2.02 WOOD-PRESERVATIVE-TREATED LUMBER

- A. Preservative Treatment by Pressure Process: AWP A U1; Use Category UC2 for interior construction not in contact with ground, Use Category UC3b for exterior construction not in contact with ground, and Use Category UC4a for items in contact with ground.
 - 1. Preservative Chemicals: Acceptable to authorities having jurisdiction and containing no arsenic or chromium. Do not use inorganic boron (SBX) for sill plates.
 - 2. For exposed items indicated to receive a stained or natural finish, chemical formulations shall not require incising, contain colorants, bleed through, or otherwise adversely affect finishes.
- B. Kiln-dry lumber after treatment to a maximum moisture content of 19 percent. Do not use material that is warped or that does not comply with requirements for untreated material.
- C. Mark lumber with treatment quality mark of an inspection agency approved by the ALSC Board of Review.
 - 1. For exposed lumber indicated to receive a stained or natural finish, mark end or back of each piece.
- D. Application: Treat items indicated on Drawings, and the following:
 - 1. Wood cants, nailers, curbs, equipment support bases, blocking, stripping, and similar members in connection with roofing, flashing, vapor barriers, and waterproofing.
 - 2. Wood sills, sleepers, blocking, furring, stripping, and similar concealed members in contact with masonry or concrete.
 - 3. Wood framing and furring attached directly to the interior of below-grade exterior masonry or concrete walls.
 - 4. Wood framing members that are less than 18 inches (460 mm) above the ground in crawlspaces or unexcavated areas.
 - 5. Wood floor plates that are installed over concrete slabs-on-grade.

2.03 DIMENSION LUMBER FRAMING

- A. Joists, Rafters, and Other Framing: No. 2 grade.
 - 1. Species:
 - a. Hem-fir (north); NLGA.
 - b. Douglas fir-larch; WCLIB or WWPA.
 - c. Spruce-pine-fir; NLGA.

- B. Exposed Exterior Framing: Hand-select material for uniformity of appearance and freedom from characteristics, on exposed surfaces and edges, that would impair finish appearance, including decay, honeycomb, knot-holes, shake, splits, torn grain, and wane.
 - 1. Species and Grade: Southern pine; No. 1 grade; SPIB.

2.04 MISCELLANEOUS LUMBER

- A. General: Provide miscellaneous lumber indicated and lumber for support or attachment of other construction, including the following:
 - 1. Blocking.
 - 2. Nailers.
- B. Structural Nailers and Ledger Boards: No. 1 grade lumber of the following species:
 - 1. Southern pine; SPIB
- C. Other Dimension Lumber Items: Construction or No. 2 grade lumber of the following species:
 - 1. Hem-fir (north); NLGA
 - 2. Mixed southern pine or southern pine; SPIB.
 - 3. Spruce-pine-fir; NLGA.
 - 4. Western woods; WCLIB or WWP.
- D. Concealed Boards: 19 percent maximum moisture content and any of the following species and grades:
 - 1. Mixed southern pine or southern pine; No. 2 grade; SPIB.
 - 2. Hem-fir or hem-fir (north); Construction or No. 2 Common grade; NLGA, WCLIB, or WWP.
 - 3. Spruce-pine-fir (south) or spruce-pine-fir; Construction or No. 2 Common grade; NeLMA, NLGA, WCLIB, or WWP.
 - 4. Northern species; No. 2 Common grade; NLGA.
 - 5. Western woods; Construction or No. 2 Common grade; WCLIB or WWP.
- E. For blocking not used for attachment of other construction, Utility, Stud, or No. 3 grade lumber of any species may be used provided that it is cut and selected to eliminate defects that will interfere with its attachment and purpose.
- F. For blocking and nailers used for attachment of other construction, select and cut lumber to eliminate knots and other defects that will interfere with attachment of other work.

2.05 FASTENERS

- A. General: Fasteners shall be of size and type indicated and shall comply with requirements specified in this article for material and manufacture.
 - 1. Where rough carpentry is exposed to weather, in ground contact, pressure-preservative treated, or in area of high relative humidity, provide fasteners with hot-dip zinc coating complying with ASTM A153/A153M.
- B. Nails, Brads, and Staples: ASTM F1667.
- C. Power-Driven Fasteners: Fastener systems with an evaluation report acceptable to authorities having jurisdiction, based on ICC-ES AC70.

- D. Post-Installed Anchors: Fastener systems with an evaluation report acceptable to authorities having jurisdiction, based on ICC-ES AC01, ICC-ES AC58, ICC-ES AC193 or ICC-ES AC308 as appropriate for the substrate.
1. Material: Carbon-steel components, zinc plated to comply with ASTM B633, Class Fe/Zn 5.

2.06 METAL FRAMING ANCHORS

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
1. Cleveland Steel Specialty Co.
 2. MiTek Industries, Inc.
 3. Simpson Strong-Tie Co., Inc.
- B. Allowable design loads, as published by manufacturer, shall meet or exceed those of products of manufacturers listed. Manufacturer's published values shall be determined from empirical data or by rational engineering analysis and demonstrated by comprehensive testing performed by a qualified independent testing agency. Framing anchors shall be punched for fasteners adequate to withstand same loads as framing anchors.
- C. Galvanized-Steel Sheet: Hot-dip, zinc-coated steel sheet complying with ASTM A653/A653M, **G60 (Z180)** coating designation.
1. Use for interior locations unless otherwise indicated.
- D. Hot-Dip, Heavy-Galvanized Steel Sheet: ASTM A653/A653M; structural steel (SS), high-strength low-alloy steel Type A (HSLAS Type A), or high-strength low-alloy steel Type B (HSLAS Type B); **G185 (Z550)** coating designation; and not less than **0.036 inch (0.9 mm)** thick.
1. Use for wood-preserved-treated lumber and exterior locations.
- E. Joist Hangers: U-shaped joist face mount or top flange hangers as indicated..
- F. I-Joist Hangers: U-shaped face mount or top flange joist hangers as indicated.
- G. Bridging: Rigid, V-section, nailless type, **0.050 inch (1.3 mm)** thick, length to suit joist size and spacing.
- H. Post Bases: Adjustable-socket type for bolting in place with standoff plate to raise post **1 inch (25 mm)** above base and with **2-inch- (50-mm-)** minimum side cover, socket **0.062 inch (1.6 mm)** thick, and standoff and adjustment plates **0.108 inch (2.8 mm)** thick.
- I. Rafter Tie-Downs (Hurricane or Seismic Ties): Bent strap tie for fastening rafters or roof trusses to wall studs below, **2-1/4 inches (57 mm)** wide by **0.062 inch (1.6 mm)** thick. Tie fits over top of rafter or truss and fastens to both sides of rafter or truss, face of top plates, and side of stud below.

2.07 PRESERVATIVE PRESSURE TREATMENT OF WOOD

- A. Preservative Treatment for Above Ground Use: decking, fencing, handrails, joists
1. Treatment: Preserve CA-C
 - a) Use 0.060 lb/cu ft (1.0 kg/m3) of CA-C in accordance with AWP U1: (UC3B) as appropriate.
 2. Treat wood in the following locations:
 - a) Above Ground Use, six inches or more from the ground.

- b) In contact with roofing, flashing, or waterproofing.
- c) In contact with masonry or concrete.
- d) Within 18 inches (450 mm) of grade.
- e) Exposed to weather.

PART 3 - EXECUTION

3.01 INSTALLATION, GENERAL

- A. Framing Standard: Comply with AF&PA's WCD 1, "Details for Conventional Wood Frame Construction," unless otherwise indicated.
- B. Set rough carpentry to required levels and lines, with members plumb, true to line, cut, and fitted. Fit rough carpentry accurately to other construction. Locate furring, nailers, blocking, and similar supports to comply with requirements for attaching other construction.
- C. Install metal framing anchors to comply with manufacturer's written instructions. Install fasteners through each fastener hole.
- D. Do not splice structural members between supports unless otherwise indicated.
- E. Sort and select lumber so that natural characteristics do not interfere with installation or with fastening other materials to lumber. Do not use materials with defects that interfere with function of member or pieces that are too small to use with minimum number of joints or optimum joint arrangement.
- F. Comply with AWPAC M4 for applying field treatment to cut surfaces of preservative-treated lumber.
 - 1. Use inorganic boron for items that are continuously protected from liquid water.
 - 2. Use copper naphthenate for items not continuously protected from liquid water.
- G. Where wood-preservative-treated lumber is installed adjacent to metal decking, install continuous flexible flashing separator between wood and metal decking.
- H. Securely attach rough carpentry work to substrate by anchoring and fastening as indicated, complying with the following:
 - 1. Table 2304.9.1, "Fastening Schedule," in ICC's International Building Code (IBC).
 - 2. Table R602.3(1), "Fastener Schedule for Structural Members," and Table R602.3(2), "Alternate Attachments," in ICC's International Residential Code for One- and Two-Family Dwellings.
 - 3. ICC-ES evaluation report for fastener.
- I. Use steel common nails unless otherwise indicated. Select fasteners of size that will not fully penetrate members where opposite side will be exposed to view or will receive finish materials. Make tight connections between members. Install fasteners without splitting wood. Drive nails snug but do not countersink nail heads unless otherwise indicated.
- J. For exposed work, arrange fasteners in straight rows parallel with edges of members, with fasteners evenly spaced, and with adjacent rows staggered.
 - 1. Comply with approved fastener patterns where applicable. Before fastening, mark fastener locations, using a template made of sheet metal, plastic, or cardboard.
 - 2. Use finishing nails unless otherwise indicated. Countersink nail heads and fill holes with wood filler.
 - 3. Use common nails unless otherwise indicated. Drive nails snug but do not countersink nail heads.

3.02 INSTALLATION OF WOOD BLOCKING AND NAILERS

- A. Install where indicated and where required for attaching other work. Form to shapes indicated and cut as required for true line and level of attached work. Coordinate locations with other work involved.
- B. Attach items to substrates to support applied loading. Recess bolts and nuts flush with surfaces unless otherwise indicated.
- C. Provide permanent grounds of dressed, pressure-preservative-treated, key-beveled lumber not less than **1-1/2 inches (38 mm)** wide and of thickness required to bring face of ground to exact thickness of finish material. Remove temporary grounds when no longer required.

3.03 INSTALLATION OF FLOOR JOIST FRAMING

- A. General: Install floor joists with crown edge up and support ends of each member with not less than **1-1/2 inches (38 mm)** of bearing on wood or metal, or **3 inches (76 mm)** on masonry. Attach floor joists as follows:
 - 1. Where supported on wood members, by toe nailing or by using metal framing anchors.
 - 2. Where framed into wood supporting members, by using wood ledgers as indicated or, if not indicated, by using metal joist hangers.
- B. Frame openings with headers and trimmers supported by metal joist hangers; double headers and trimmers where span of header exceeds **24 inches (600 mm)**.
- C. Do not notch in middle third of joists; limit notches to one-sixth depth of joist, one-third at ends. Do not bore holes larger than one-third depth of joist; do not locate closer than **2 inches (50 mm)** from top or bottom.
- D. Provide solid blocking of **2-inch nominal (38-mm actual)** thickness by depth of joist at ends of joists unless nailed to header or band.
- E. Lap members framing from opposite sides of beams, girders, or partitions not less than **4 inches (102 mm)** or securely tie opposing members together. Provide solid blocking of **2-inch nominal (38-mm actual)** thickness by depth of joist over supports.
- F. Anchor members paralleling masonry with **1/4-by-1-1/4-inch (6.4-by-32-mm)** metal strap anchors spaced not more than **96 inches (2438 mm)** o.c., extending over and fastening to three joists. Embed anchors at least **4 inches (102 mm)** into grouted masonry with ends bent at right angles and extending **4 inches (102 mm)** beyond bend.
- G. Provide solid blocking between joists under jamb studs for openings.
- H. Under non-load-bearing partitions, provide double joists separated by solid blocking equal to depth of studs above.
 - 1. Provide triple joists separated as above, under partitions receiving ceramic tile and similar heavy finishes or fixtures.
- I. Provide bridging of type indicated below, at intervals of **96 inches (2438 mm)** o.c., between joists.
 - 1. Diagonal wood bridging formed from bevel-cut, **1-by-3-inch nominal- (19-by-64-mm actual-)** size lumber, double-crossed and nailed at both ends to joists.
 - 2. Steel bridging installed to comply with bridging manufacturer's written instructions.
- J. Provide special framing as indicated for eaves, overhangs, dormers, and similar conditions if any.

3.04 PROTECTION

- A. Protect wood that has been treated with inorganic boron (SBX) from weather. If, despite protection, inorganic boron-treated wood becomes wet, apply EPA-registered borate treatment. Apply borate solution by spraying to comply with EPA-registered label.
- B. Protect rough carpentry from weather. If, despite protection, rough carpentry becomes wet, apply EPA-registered borate treatment. Apply borate solution by spraying to comply with EPA-registered label.

END OF SECTION

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**SECTION 06 6300
PLASTIC RAILINGS**

PART 1 - GENERAL

1.01. SECTION INCLUDES

- A. Plastic resin-based-core railings.

1.02. REFERENCES

- A. References, General: Versions of the following standards current as of the date of issue of the project or required by applicable code apply to the Work of this Section.
- B. ASTM International (ASTM):
 - 1. ASTM A123/A123M - Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.
 - 2. ASTM A307 - Carbon Steel Bolts, Studs, and Threaded Rods 60,000 psi Tensile Strength.
 - 3. ASTM A500/A500M - Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes.
 - 1. ASTM B209/B209M - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate.
 - 4. ASTM B221M - Aluminum-Alloy Extruded Bar, Rod, Wire, Profiles, and Tube.

1.03. SUBMITTALS

- A. Product Data: Manufacturer's technical literature for each product specified.
 - 5. Include preparation instructions and recommendations.
 - 6. Include storage and handling requirements and recommendations.
 - 7. Include manufacturer's installation instructions.
 - 8. Include load calculation documentation stamped by a Professional Engineer licensed in the jurisdiction in which Project is located.
- B. Shop Drawings:
 - 9. Include plans, elevations, sections, and details.
 - 10. Include points of attachment and their corresponding static and dynamic loads imposed on deck and post foundations.
- C. Delegated Design Submittal: For railings, including analysis data signed and sealed by the qualified professional engineer responsible for their preparation.
- D. Samples for Initial Selection: For each finish product and finish specified, sets of color chips representing manufacturer's full range of available colors.
- E. Samples for Verification: For each material and for each color, in manufacturer's standard size.

1.04. QUALITY ASSURANCE

- A. Qualification Data:
 - 1. Manufacturer Qualifications: Company specializing in manufacturing products specified in this Section with minimum five years documented experience.
 - 2. Installer Qualifications: Railing manufacturer, or experienced Installer with a record of successful installations of similar type and size to that specified.

- B. Professional Engineer Qualifications: Documented experience with providing delegated-design engineering services of the kind required by this Section, including documentation that engineer is licensed in the jurisdiction in which Project is located.

1.05. DELIVERY, STORAGE, AND HANDLING

- A. Transport, handle, store and protect railing components so they are in undamaged condition when installed.
- B. Store railing components in manufacturer's unopened packaging.
- C. Store railing components off the ground in a dry, protected, covered and secure area.

1.06. WARRANTY

- A. Special Warranty: On manufacturer's standard form in which manufacturer agrees to replace components which fail in materials or workmanship within specified warranty period.
 - 3. Warranty Period: 20 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.01. PERFORMANCE REQUIREMENTS

- A. Structural Requirements: Engineer railings to withstand live and dead loads according to authorities having jurisdiction and information indicated within limits and under conditions indicated, without material failure or permanent deformation of structural members.
- B. Delegated Design: Design railing to withstand design and operational loads.

2.02. MANUFACTURER

- A. Basis of Design: [Bella Premier Series Vinyl Railing](#) with Compositcore® resin-based core manufactured by Barrette Outdoor Living; Egg Harbor City, New Jersey 08215; (877) 265-2220; www.barretteoutdoorliving.com.
 - 1. Substitutions: Not permitted.
 - 2. Substitutions: Submit request for substitution according to Instructions to Bidders and Division 01 General Requirements.

2.03. RAILING SYSTEM

- A. Use manufacturer's standard components.
- B. System Description:
 - 3. Height: 42 inches
 - 4. Length: As indicated on the Drawings
 - 5. Color: Clay
- C. Top Rails:
 - 1. Contour Shaped: Resin-based core with no wood or organic fibers and acrylic exterior surfaces.

2. Rail Topper, to Support Deck Board:
 - a. Basis of Design Product: Barrett Outdoor Living, Aluminum Rail Topper with Premier Deck Board.
- D. Bottom Rail: 2.53-inches-wide by 2.75-inches-high.
- E. Infill:
 1. Square Balusters: 1-3/8-inch square, 0.07-inch-thick extruded PVC.
 3. Turned: Injection-molded PVC compound with rectangular top and bottom portions measuring 1-3/8 by 1-3/8 inch, 0.10 thickness and with a middle portion having concentric molded turnings.
 2. Round Balusters: 3/4-inch round, 6063-T5, black powder-coated aluminum.
- F. Posts: Vertical structural posts, 2-inch-square galvanized steel tube with 3-1/4- by 3-1/4 by 3/8-inch-thick galvanized steel plate welded to post. Structural post to be stabilized inside [4-inch] [5-inch]-square PVC post sleeve.
- G. Fasteners:
 1. Stainless steel fasteners to be concealed upon installation.
 2. Attachment to Wood Decking: 3/8-inch diameter A307 bolts for through bolt attachment.
 3. Attachment to Concrete: Comply with manufacturer's instructions.
- H. Accessories: Include brackets, trim rings, hardware, and all accessories required for a complete installation.

2.04. MATERIALS

- A. Plastic Material: Manufacturer's proprietary, weather-resistant, resin-based composite material with no wood or organic fibers.
- B. Aluminum: Alloy and temper recommended by aluminum producer and finisher for type of use and finish indicated, and with not less than strength and durability properties of alloy and temper designated.
 1. Extruded Bar and Tube: ASTM B221, alloy 6063-T5/T52
 2. Plate and Sheet: ASTM B209/B209M, alloy 6061-T6.
- C. Polyvinyl Chloride Components: Rigid PVC homopolymer compound modified for cold weather impact retention with high levels of Titanium Dioxide pigment for long-term ultraviolet light resistance.
- D. Steel Components: ASTM A500/A500M, Grade A cold-rolled steel tubing with G-60 zinc coating on both inside and outside surfaces in accordance with ASTM A123/A123 hot-dipped electroplating process.

PART 3 - EXECUTION

3.01. INSPECTION

- A. Examine railing system substrate with Installer present. Inspect for erection tolerances and other conditions that would adversely affect installation of railing system.

1. Inspect substrate that will support railing system to determine if support components are installed as indicated on approved shop drawings and are within tolerances acceptable to railing system manufacturer.
- B. Proceed with railing installation once out-of-tolerance work and other deficient conditions are corrected.

3.02. RAILING INSTALLATION

- A. General: Install railing system in accordance with approved shop drawings and manufacturer's written instructions.
- B. Support Installation: Install blocking and other supports at locations, spacings, and with fasteners recommended by manufacturer.
- C. During installation, carefully handle and store PVC components to avoid contact with abrasive surfaces. Install components in sequence as recommended by manufacturer.

3.03. CLEANING AND PROTECTION

- A. Clean finished surfaces as recommended by railing system manufacturer.
- B. Replace damaged or discolored components that cannot be restored by field repair.

END OF SECTION

**SECTION 06 7300
COMPOSITE DECKING**

PART 1 GENERAL

1.01. SECTION INCLUDES

- A. Composite Decking – Basis of Design: Trex Enhance Basics and Naturals

1.02. RELATED SECTIONS

- A. Section 06-1100 – Rough Carpentry

1.03. REFERENCES

- A. ASTM D-7032: Standard Specification for Establishing Performance Ratings for Wood-Plastic Composite Deck Boards and Guardrail Systems (Guards or Handrails), ASTM International.
- B. ASTM D-7031: Standard Guide for Evaluating Mechanical and Physical Properties of Wood-Plastic Composite Products, ASTM International
- C. ASTM E-84: Test Method for Surface Burning Characteristics of Building Materials, ASTM International.
- D. ASTM D 570: Water Absorption of Plastics
- E. ASTM D 1761: Mechanical Fasteners in Wood
- F. ASTM D1413: Test method for Wood Preservatives by Laboratory Soil-block Cultures
- G. ASTM C177: Standard Test Method for Steady-State Heat Flux Measurements and Thermal Transmission Properties by Means of the Guarded-Hot-Plate Apparatus

1.04. DESIGN/PERFORMANCE REQUIREMENTS

- A. Structural Performance:
 - a. Deck: Uniform Load – An allowable span of 16 in. on-center and 100 lbf/sq.ft.
- B. Fire-Test Response Characteristics per ASTM E-84.
 - a. Flame Spread Index– Class C.

1.05. SUBMITTALS

- A. Product Data Indicate sizes, profiles, surface style, and performance characteristics.
- B. Samples: For each product specified, one sample representing actual product color, size, and finish.

1.06. DELIVERY, STORAGE, AND HANDLING

- A. Store Trex products on a flat and level surface. Support bundles on supplied dunnage.
- B. Keep material covered using the provided bundle cover until time of installation.

1.07. WARRANTY

- A. Provide 5 year warranty on material and labor.

PART 2 PRODUCTS

2.01. MANUFACTURERS

- A. Contract Documents are based on products supplied by; Trex Company, Inc., 160 Exeter Dr., Winchester, VA 22603.
- B. Substitutions: Not permitted under Division 01

2.02. APPLICATIONS/SCOPE

- A. Wood-Plastic Composite Lumber;
 - a. Material Description: Composite Decking consisting of recycled Linear Low Density Polyethylene (LLDPE) and recycled wood. The product is extruded into shapes and sizes as follows:
 - i. Trex Enhance Decking Boards; 1 x 5.5".
 - ii. Lengths – 12, 16, and 20 feet
 - iii. Color – To be specified by owner from Trex' standard list of colors.
 - b. Physical and Mechanical Properties as follows:

Test	Test Method	Value
Flame Spread Index	ASTM E 84	Class C
Thermal Expansion	ASTM D1037	1.9 x 10 ⁻⁵ inch/inch/degreeF
Moisture Absorption	ASTM D1037	< 1%
Screw Head Pull-Through	ASTM D1761	161 lbf per screw**
Fungus Resistance	ASTM D1413	Rating - no decay
Termite Resistance	AWPA E1-72	Rating = 9.6

** Fastener used in testing: #8 x 2.5 in. approved Stainless Steel Screw

2.03. ACCESSORIES

- A. Fasteners:
 - a. Provide fasteners as recommended by manufacturer

PART 3 EXECUTION

3.01. INSTALLATION

- A. Install according to Manufacturer's installation guidelines
- B. Cut, drill, and rout using carbide tipped blades.
- C. Do not use composite wood material for structural applications.

3.02. CLEANING

- A. Following cleaning recommendations as found in Manufacturer's installation guide.

END OF SECTION

SECTION 07 1900
WATER REPELLENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Water repellents applied to exterior masonry and stone surfaces.

1.02 REFERENCE STANDARDS

- A. ASTM C642 - Standard Test Method for Density, Absorption, and Voids in Hardened Concrete; 2013.
- B. ASTM D3960 - Standard Practice for Determining Volatile Organic Compound (VOC) Content of Paints and Related Coatings; 2005 (Reapproved 2018).
- C. ASTM D5095 - Standard Test Method for Determination of the Nonvolatile Content in Silanes, Siloxanes, and Silane-Siloxane Blends Used in Masonry Water Repellent Treatments; 1991 (Reapproved 2013).

1.03 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide product description.
- C. Manufacturer's Installation Instructions: Indicate special procedures and conditions requiring special attention; cautionary procedures required during application.
- D. Manufacturer's Qualification Statement.
- E. Installer's Qualification Statement.

1.04 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section, with not less than three years documented experience.
- B. Installer Qualifications: Company specializing in performing work of type specified and with at least three years of documented experience
- C. Owner reserves the right to provide continuous independent inspection of surface preparation and application of water repellent.

1.05 MOCK-UP

- A. Prepare a representative surface 36 inch by 36 inch (0.91 m by 0.91 m) in size using specified materials and preparation and application methods on surfaces identical to those to be coated; approved mock-up constitutes standard for workmanship.
- B. For proposed substitutions, prepare side-by-side mock-ups of specified and substitute products.
- C. Locate where directed.
- D. Mock-up may remain as part of the Work.

1.06 FIELD CONDITIONS

- A. Protect liquid materials from freezing.
- B. Do not apply water repellent when ambient temperature is lower than 50 degrees F (10 degrees C) or higher than 100 degrees F (38 degrees C).
- C. Do not apply water repellents when wind velocity is higher than 15 mph

1.07 WARRANTY

- A. See Section 01 7800 - Closeout Submittals, for additional warranty requirements.
- B. Correct defective Work within a five year period after Date of Substantial Completion.
- C. Provide five year manufacturer warranty

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Silane, Siloxane, Silane-Siloxane Blend, and Siliconate Water Repellents:
 - 1. BASF Construction Chemicals; www.buildingsystems.basf.com/#sle.
 - 2. Pecora Corporation; KlerSeal 910-W/920-W Water-Based Penetrating Masonry Sealer: www.pecora.com/#sle.
 - 3. PPG Paints; www.ppgpaints.com/#sle.
 - 4. PROSOCO, Inc; www.prosoco.com/#sle.
 - 5. The QUIKRETE Companies; QUIKRETE® Concrete & Masonry Waterproofing Sealer: www.quikrete.com/#sle.
 - 6. Sherwin-Williams Company; www.sherwin-williams.com/#sle.
 - 7. Tnemec Company, Inc; www.tnemec.com/#sle.
 - 8. Substitutions: See Section 01 6000 - Product Requirements.

2.02 MATERIALS

- A. Water Repellent: Non-glossy, colorless, penetrating, water-vapor-permeable, non-yellowing sealer, that dries invisibly leaving appearance of substrate unchanged.
 - 1. Applications: Vertical surfaces and non-traffic horizontal surfaces.
 - 2. Number of Coats: Two.
 - 3. Water-based siloxane, silane, or blend that reacts chemically with concrete and masonry.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify existing conditions before starting work.
- B. Verify joint sealants are installed and cured.
- C. Verify surfaces to be coated are dry, clean, and free of efflorescence, oil, or other matter detrimental to application of water repellent.

3.02 PREPARATION

- A. Protection of Adjacent Work:
 - 1. Protect adjacent landscaping, property, and vehicles from drips and overspray.
 - 2. Protect adjacent surfaces not intended to receive water repellent.
- B. Prepare surfaces to be coated as recommended by water repellent manufacturer for best results.
- C. Remove loose particles and foreign matter.
- D. Remove oil and foreign substances with a chemical solvent that will not affect water repellent.
- E. Allow surfaces to dry completely to degree recommended by water repellent manufacturer before starting coating work.

3.03 APPLICATION

- A. Apply water repellent in accordance with manufacturer's instructions, using procedures and application methods recommended as producing the best results.
- B. Apply at rate recommended by manufacturer, continuously over entire surface.
- C. Apply two coats, minimum.
- D. Remove water repellent from unintended surfaces immediately by a method instructed by water repellent manufacturer.

END OF SECTION

SECTION 07 2500 WEATHER BARRIERS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Water-resistive barriers.

1.02 RELATED REQUIREMENTS

- A. Section 07 6200 - Sheet Metal Flashing and Trim: Metal flashings installed in conjunction with weather barriers.

1.03 DEFINITIONS

- A. Weather Barriers: Materials or assemblies forming water-resistive barriers, air barriers, vapor retarders, or combination of one or more assemblies.
- B. Water-Resistive Barriers: Materials or assemblies installed behind exterior wall coverings; designed to prevent liquid water from further penetration into exterior wall assembly.

1.04 REFERENCE STANDARDS

- A. ASTM D779 - Standard Test Method for Determining the Water Vapor Resistance of Sheet Materials in Contact with Liquid Water by the Dry Indicator Method; 2016.
- B. ASTM E2357 - Standard Test Method for Determining Air Leakage Rate of Air Barrier Assemblies; 2024.
- C. ASTM E96/E96M - Standard Test Methods for Gravimetric Determination of Water Vapor Transmission Rate of Materials; 2023.

1.05 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements for submittal procedures.
- B. Product Data: Provide data on material characteristics.
- C. Manufacturer's Installation Instructions: Indicate preparation, installation methods, and storage and handling criteria.

1.06 FIELD CONDITIONS

- A. Maintain temperature and humidity recommended by materials manufacturers before, during, and after installation.

PART 2 PRODUCTS

2.01 WATER-RESISTIVE BARRIERS

- A. Description: Materials installed behind exterior wall coverings; designed to prevent liquid water from further penetration into exterior wall assembly. Primary materials include mechanically applied sheets; accessory materials include flashings and seam tapes.
- B. Water-Resistive Breathable Barrier: Woven, polyolefin fabric sheet in accordance with ASTM D779, 60-minute water resistance.
 - 1. Water Vapor Permeance: 10 perms (574 ng/(Pa s sq m)), minimum, when tested in accordance with ASTM E96/E96M, method A.
 - 2. Products:
 - a. National Shelter Products, Inc; DRYline W: www.nationalshelter.com/#sle.
 - b. Substitutions: See Section 01 6000 - Product Requirements.
- C. Water-Resistive Barrier Building Wrap: Mechanically fastened building wrap.

2.02 ACCESSORIES

- A. Seal and Perimeter Tapes: As recommended by water-resistive barrier manufacturer.
- B. Flashings and Sealants: As recommended by water-resistive barrier manufacturer for application.

- C. Metal Flashings: See Section 07 6200.

2.03 FASTENERS

- A. Fasteners for Attaching Water-Resistive Barriers to Substrates: As recommended by barrier manufacturer for application.
- B. Self-Sealing Washers: Solid plastic, 2 inch (25 mm) diameter washers; seals building-wrap air barriers against air penetration.
 - 1. Products:
 - a. TruFast Walls, a Division of Altenloh, Brinck & Co. US, Inc; Thermal-Grip Flat Washer: www.trufastwalls.com/#sle.
 - b. Substitutions: See Section 01 6000 - Product Requirements.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that surfaces and conditions comply with requirements of this section.

3.02 PREPARATION

- A. Remove projections, protruding fasteners, and loose or foreign matter that might interfere with proper installation.
- B. Clean and prime substrate surfaces to receive adhesives and sealants in accordance with manufacturer's installation instructions.

3.03 INSTALLATION

- A. Install materials in accordance with manufacturer's installation instructions.
- B. Mechanically Fastened Sheets:
 - 1. Install sheets in shingle fashion to shed water; align horizontally.
 - 2. Overlap seams as recommended by manufacturer, 6 inches (152 mm), minimum.
 - 3. Overlap at outside and inside corners as recommended by manufacturer, 12 inches (305 mm), minimum.
 - 4. Install water-resistive barrier over jamb flashings.
 - 5. Install head flashings under water-resistive barrier.
 - 6. At framed openings with frames having nailing flanges, extend sheet into opening and over flanges; at head of opening, seal sheet over flange and flashing.

3.04 FIELD QUALITY CONTROL

- A. See Section 01 4000 - Quality Requirements for additional requirements.
- B. Owner's Inspection and Testing: Cooperate with Owner's testing agency.
 - 1. Allow access to work areas and staging.
 - 2. Notify Owner's testing agency in writing of schedule for work of this section to allow sufficient time for testing and inspection.
 - 3. Do not cover work of this section until testing and inspection is accepted.

END OF SECTION

SECTION 07 3113
ASPHALT SHINGLES

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Asphalt shingle roofing.
- B. Flexible sheet membranes for eave protection, underlayment, and valley protection.
- C. Pipe penetration boots
- C. Associated metal flashing and accessories.

1.02 REFERENCE STANDARDS

- A. ASTM D226/D226M - Standard Specification for Asphalt-Saturated Organic Felt Used in Roofing and Waterproofing; 2009.
- B. ASTM D1970/D1970M - Standard Specification for Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection; 2013.
- C. ASTM D3161 - Standard Test Method for Wind-Resistance of Steep Slope Roofing Products (Fan-Induced Method); 2014.
- D. ASTM D3462 - Standard Specification for Asphalt Shingles Made From Glass Felt and Surfaced with Mineral Granules; 2010a.
- E. SMACNA (ASMM) - Architectural Sheet Metal Manual; 2012.

1.03 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide data indicating material characteristics.
- C. Shop Drawings: For metal flashings, indicate specially configured metal flashings.
- D. Samples: Submit two samples of each shingle color indicating color range and finish texture/pattern; for color selection.
- E. Manufacturer's Installation Instructions: Indicate installation criteria and procedures.

1.04 FIELD CONDITIONS

- A. Do not install shingles or eave protection membrane when surface temperatures are below 45 degrees F (7 degrees C).

PART 2 PRODUCTS

2.01 SHINGLES

- A. Manufacturers:
 - 1. Owens Corning Corp: www.owenscorning.com.
 - 2. Substitutions: See Section 01 6000 - Product Requirements.
- B. Asphalt Shingles: Asphalt-coated glass felt, mineral granule surfaced, complying with ASTM D3462; Class A fire resistance.
 - 1. Wind Resistance: Class F, when tested in accordance with ASTM D3161.
 - 2. Warranted Wind Speed: Not less than tested wind resistance.
 - 3. Algae Resistant.
 - 4. Self-sealing type.

5. Style: Square.
6. Basis of Design: Duration by Owens Corning.
7. Color: as selected by architect from full range of standard colors.

2.02 SHEET MATERIALS

- A. Underlayment: Synthetic non-asphaltic sheet, intended by manufacturer for mechanically fastened roofing underlayment without sealed seams.
 1. Type: Woven polypropylene with anti-slip polyolefin coating on both sides.
 2. Self Sealability: Passing nail sealability test specified in ASTM D1970/D1970M.
 3. Low Temperature Flexibility: Passing test specified in ASTM D1970/D1970M.
 4. Fasteners: As specified by manufacturer and building code qualification report or approval, if any.
 5. Manufacturers:
 - a. Deck Defense, Owens Corning.
 - b. Substitutions: See Section 01 6000 - Product Requirements.
- B. Self Adhering (Ice and Water Barrier) Underlayment: Self-adhering rubber-modified asphalt sheet complying with ASTM D1970/D1970M; 22 mil (0.55 mm) total thickness; with strippable release film and woven polypropylene sheet top surface.
 1. Manufacturers:
 - a. Weather Lock Flex, Owens Corning.
 - b. Substitutions: See Section 01 6000 - Product Requirements.

2.03 ACCESSORIES

- A. Nails: Standard round wire shingle type, of hot-dipped zinc coated steel, 10 wire gage, 0.1019 inch (2.59 mm) shank diameter, 3/8 inch (9.5 mm) head diameter, of sufficient length to penetrate through roof sheathing or 3/4 inch (19 mm) into roof sheathing or decking.
- B. Lap Cement: Fibrated cutback asphalt type, recommended for use in application of underlayment, free of toxic solvents.
- C. Ridge Vents: Plastic, extruded with vent openings that do not permit direct water or weather entry; flanged to receive shingles; Vent Sure manufactured by Owens Corning.

2.04 METAL FLASHING and PIPE BOOTS

- A. Metal Flashing: Provide sheet metal eave edge, gable edge, ridge, ridge vents, open valley flashing, chimney flashing, dormer flashing, and other flashing indicated.
- B. Drip Edge: Alcoa 19 gauge oversized drip edge (1.5" drop).
- C. Pipe Penetration Boots: Oatey galvanized roof penetration flashing with elastomeric collar.
- D. Furnace Flue Flashing: Duravent 18 gauge galvanized adjustable pitched gas vent roof flashing with separate rain ring.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify existing conditions prior to beginning work.
- B. Verify that deck is of sufficient thickness to accept fasteners.
- C. Verify that roof penetrations and plumbing stacks are in place and flashed to deck surface.

- D. Verify roof openings are correctly framed.
- E. Verify deck surfaces are dry, free of ridges, warps, or voids.

3.02 PREPARATION

- A. Seal roof deck joints wider than 1/16 inch (1.5 mm) as recommended by shingle manufacturer.
- B. At areas where eave protection membrane is to be adhered to substrate, fill knot holes and surface cracks with latex filler.
- C. Broom clean deck surfaces before installing underlayment or eave protection.
- D. Install eave edge and gable edge flashings tight with fascia boards. Weather lap joints 2 inches (50 mm) and seal with plastic cement. Secure flange with nails spaced 8 inches (200 mm) on center.
- E. Replace all roof penetration flashing as specified in 2.04 Metal Flashing and Pipe Boots, Section C. Pipe Penetration Boots, and D. Furnace Flue Flashing.
- F. Remove damaged roof sheathing and replace in accordance with Section 061000 Rough Carpentry. Review quantity with owner prior to installation.

3.03 INSTALLATION - SELF ADHERING UNDERLAYMENT

- A. Install self-adhering underlayment from eave edge to minimum 2 ft. (600 mm) up-slope beyond interior face of exterior wall.
- B. Install self-adhering underlayment (Ice and Water Barrier) in accordance with manufacturer's instructions.

3.04 INSTALLATION - MECHANICALLY FASTENED UNDERLAYMENT

- A. Underlayment At Roof Slopes Up to 4:12 (At Roof Slopes Up to 1:3): Install two layers of underlayment over area not protected by eave protection, with ends and edges weather lapped minimum 4 inches (100 mm). Stagger end laps of each consecutive layer. Nail in place.
- B. Underlayment At Roof Slopes Greater Than 4:12 (At Roof Slopes Greater Than 1:3): Install underlayment perpendicular to slope of roof, with ends and edges weather lapped minimum 4 inches (100 mm). Stagger end laps of each consecutive layer. Nail in place. Weather lap minimum 4 inches (100 mm) over eave protection.
- C. Items projecting through or mounted on roof: Weather lap and seal watertight with plastic cement.

3.05 INSTALLATION - VALLEY PROTECTION

- A. Install self-adhering underlayment a minimum of 36 inches wide centered on valley. Lap ends 6 inches and seal.
- B. Install valley protection in accordance with SMACNA (ASMM).
- C. Install flexible flashing in accordance with manufacturer's instructions.
- D. At Exposed Valleys: Install one layer of sheet metal flashing, minimum 24 inches (600 mm) wide, centered over open valley and crimped to guide water. Weather lap joints minimum 2 inch (50 mm) wide band of lap cement along each edge of first, press roll roofing into cement, and nail in place minimum 18 inches (450 mm) on center, 1 inch (25 mm) from edges.

3.06 INSTALLATION - METAL FLASHING AND ACCESSORIES

- A. Weather lap joints minimum 2 inches (50 mm) and seal weather tight with plastic cement.

- B. Secure in place with nails and conceal fastenings.
- C. Items Projecting Through or Mounted on Roofing: Flash and seal weather tight with plastic cement.

3.07 INSTALLATION - SHINGLES

- A. Install shingles in accordance with manufacturer's instructions.
 - 1. Fasten individual shingles using 2 nails per shingle, or as required by code, whichever is greater.
 - 2. Fasten strip shingles using 4 nails per strip, or as required by code, whichever is greater.
- B. Place shingles in straight coursing pattern with 5 inch (125 mm) weather exposure to produce double thickness over full roof area. Provide double course of shingles at eaves.
- C. Project first course of shingles 3/4 inch (19 mm) beyond fascia boards.
- D. Extend shingles 1/2 inch (13 mm) beyond face of gable edge fascia boards.
- E. Coordinate installation of roof mounted components or work projecting through roof with weather tight placement of counterflashing.
- F. Complete installation to provide weather tight service.
- G. Install ridge vent in accordance with manufactures instructions.

3.08 PROTECTION

- A. Do not permit traffic over finished roof surface.

END OF SECTION

SECTION 07 4616 ALUMINUM SIDING

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Aluminum siding.

1.02 RELATED REQUIREMENTS

- A. Section 072500 - Weather Barriers: Water-resistive barrier.
- B. Section 076200 - Sheet Metal Flashing and Trim: Metal flashings and trim associated with metal siding.
- C. Section 079200 - Joint Sealants: Sealing joints between siding, adjacent construction, and fixtures.

1.03 REFERENCE STANDARDS

- A. AAMA 609 & 610 - Cleaning and Maintenance Guide for Architecturally Finished Aluminum (Combined Document); 2015.
- B. AAMA 2605 - Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels (with Coil Coating Appendix); 2022.
- C. ASTM B209/B209M - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate; 2021a.
- D. ASTM C920 - Standard Specification for Elastomeric Joint Sealants; 2018.
- E. ASTM D2244 - Standard Practice for Calculation of Color Tolerances and Color Differences from Instrumentally Measured Color Coordinates; 2023.
- F. ASTM D4214 - Standard Test Methods for Evaluating the Degree of Chalking of Exterior Paint Films; 2023.

1.04 SUBMITTALS

- A. See Section 013000 - Administrative Requirements for submittal procedures.
- B. Product Data: Manufacturer's data sheets for each product, including:
 - 1. Preparation instructions and recommendations.
 - 2. Siding materials, underlayment, flashings, fasteners and accessories.
 - 3. Dimensions, physical properties, and typical details.
 - 4. Storage and handling requirements and recommendations.
 - 5. Installation instructions and recommendations.
- C. Samples: For each finish product specified, provide two complete sets of color chips representing manufacturer's full range of available colors and patterns, including the following:
- D. Manufacturer's qualification statement.
- E. Installer's qualification statement.
- F. Executed warranty.

1.05 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section, with at least five years of documented experience.
- B. Installer Qualifications: Company specializing in performing work of the type specified and with at least five years of documented experience.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Deliver and store products in manufacturer's unopened packaging bearing brand name and manufacturer's identification until ready for installation.

- B. Verify quantities and condition immediately upon receipt; remove damaged materials from site, and coordinate with manufacturer to replace with new materials meeting specified requirements.
- C. Store products elevated above ground, within manufacturer's temperature and environmental limits, away from moisture, and protected from traffic and construction activities. Minimize on-site storage before installation.

1.07 FIELD CONDITIONS

- A. Do not install siding when air temperature or relative humidity are outside manufacturer's limits.

1.08 WARRANTY

- A. See Section 017800 - Closeout Submittals for additional warranty requirements.
- B. Manufacturer's Warranty: Provide manufacturer's standard lifetime, non-prorated, transferable warranty, including 50 year hail protection warranty.
- C. Manufacturer's warranty on siding and trim accessories finishes to cover the following:
 - 1. Color fading of five Hunter color-difference units, maximum, when tested in accordance with ASTM D2244.
 - 2. Chalk rating of eight, maximum, when tested in accordance with ASTM D4214.
- D. Extended Correction Period: Correct defective work within 2-year period commencing on Date of Substantial Completion.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Aluminum Siding Manufacturers:
 - 1. Ply Gem; www.plygem.com/#sle.
 - 2. Substitutions: See Section 016000 - Product Requirements.

2.02 ALUMINUM SIDING

- A. Type S-1, Horizontal Siding: Precoated aluminum sheet, 0.016-inch (0.41 mm) minimum base metal thickness.
 - 1. Profile: Clapboard, Double 5-Inch; 5 inches (127 mm) wide; 10 inch (254 mm) exposure.
 - 2. Nailing Hem: Single layer, with 1-1/8 inch (28 mm) elongated nail holes at maximum 1-5/8 inches (41 mm) on center.
 - 3. Length: 12 ft (3.66 m), minimum, seamless.
 - 4. Finish: Precoated in shop with manufacturer's standard SMP (silicone-modified polyester) coating system.
 - 5. Texture: Smooth.

2.03 MATERIALS

- A. Precoated Aluminum Sheet: ASTM B209/B209M, 3105 alloy, O temper, with smooth surface texture; continuous-coil-coated on exposed surfaces with indicated finish coating and manufacturer's standard panel back coating.

2.04 ACCESSORIES

- A. Support for Cladding and Continuous Insulation: Thermal clip and rail.
 - 1. Vertical Rail: Cladding support, extruded aluminum with 0.094-inch (2.4 mm) minimum thickness, and 118-1/8 inches (3000 mm) long; attached to bracket.
 - 2. Fasteners: Provide support system and cladding attachment fasteners as recommended by system manufacturer in accordance with requirements.
 - 3. Products:
 - a. Cladiator; CL 300: www.cladiator.com/#sle.
- B. Fasteners: Aluminum; nonstaining, prefinished to match siding.
- C. Sealant: Comply with ASTM C920; see Section 079200.
- D. Flashing: Siding manufacturer's standard, factory-finished flashing accessories.

- E. Provide the following accessories as required for complete installation:
 - 1. Starter strip.
 - 2. Corner post.
 - 3. J-Channels.
 - 4. Drip cap.

2.05 FINISHES

- A. Precoated in shop with manufacturer's standard PVDF coating system.
- B. Fluoropolymer Coil-Coating System: Multi-coat system for metal coils, complying with AAMA 2605, including at least 70 percent PVDF resin with minimum total dry film thickness (DFT) of 0.9 mil, 0.0009 inch (0.023 mm) on at least 80 percent of coil-coated metal surfaces.
 - 1. Color: As selected by Architect from manufacturer's full range of available colors.
 - 2. Texture: Smooth.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Examine substrate conditions before beginning installation.
- B. Verify dimensions and acceptable substrate condition.
- C. If substrate preparation is responsibility of another installer, notify Architect of unsatisfactory conditions before proceeding.
- D. Do not proceed with installation until unacceptable conditions have been corrected.

3.02 PREPARATION

- A. Surface Preparation: Prepare surfaces as recommended by manufacturer.
- B. Protect surrounding areas and adjacent surfaces during execution of this work.

3.03 INSTALLATION

- A. Install aluminum siding, trim, and accessories in accordance with manufacturer's written instructions.
- B. Attach siding using manufacturers recommended fasteners, sealants, and adhesives, allowing for thermal expansion.
- C. Do not use exposed fasteners.
- D. Horizontal Clapboard: Work from base of installation to top; stagger lap joints in horizontal siding in uniform pattern while installing successive courses of siding.

3.04 CLEANING

- A. See Section 017000 - Execution and Closeout Requirements for additional requirements.
- B. Remove grease and oil films, excess joint sealer, handling marks, and other installation debris from aluminum siding, leaving siding clean and unmarked, free from dents, creases, waves, scratch marks, or other damage to material finishes.
- C. Upon completion of installation, thoroughly clean prefinished aluminum surfaces in accordance with AAMA 609 & 610.
- D. Remove excess materials and debris from project site.

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

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SECTION 07 4646
FIBER CEMENT SIDING

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Wood-fiber cement siding.

1.02 RELATED REQUIREMENTS

- A. Section 07 9200 - Joint Sealants: Sealing joints between siding and adjacent construction and fixtures.
- B. Section 09 9113 - Exterior Painting: Field painting.

1.03 REFERENCE STANDARDS

- A. ASTM C1186 - Standard Specification for Flat Fiber Cement Sheets; 2008 (Reapproved 2012).

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, including:
 - 1. Manufacturer's requirements for related materials to be installed by others.
 - 2. Preparation instructions and recommendations.
 - 3. Storage and handling requirements and recommendations.
 - 4. Installation methods, including nail patterns.

PART 2 PRODUCTS

2.01 SIDING

- A. Panel Siding: Vertically oriented panels made of cement and cellulose fiber formed under high pressure with integral surface texture, complying with ASTM C1186 Type A Grade II; with machined edges, for nail attachment.
 - 1. Length (Height): 96 inches, nominal.
 - 2. Width: 48 inches.
 - 3. Thickness: 5/16 inch, nominal.
 - 4. Finish: Factory applied topcoat.
 - 5. Color: As selected by Architect from manufacturers full range of available colors.
 - 6. Warranty: 50 year limited; transferable.
 - 7. Panel Siding Manufacturers:
 - a. James Hardie Building Products, Inc: www.jameshardie.com.

2.02 ACCESSORIES

- A. Trim: Same material and texture as siding.
- B. Fasteners: Galvanized or corrosion resistant; length as required to penetrate minimum 1-1/4 inch.

PART 3 EXECUTION

3.01 PREPARATION

- A. Examine substrate and clean and repair as required to eliminate conditions that would be detrimental to proper installation.
- B. Verify that water-resistive barrier has been installed over substrate completely and correctly.
- C. Do not begin until unacceptable conditions have been corrected.
- D. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.02 PREPARATION

- A. Install sheet metal flashing:
 - 1. Above door and window trim and casings.

2. Above horizontal trim in field of siding.

3.03 INSTALLATION

- A. Install in accordance with manufacturer's instructions and recommendations.
 1. Read warranty and comply with all terms necessary to maintain warranty coverage.
 2. Use trim details indicated on drawings.
 3. Touch up all field cut edges before installing.
 4. Pre-drill nail holes if necessary to prevent breakage.
- B. Over Wood and Wood-Composite Sheathing: Fasten siding through sheathing into studs.
- C. Over Steel Studs: Use hot-dipped galvanized self-tapping screws, with the points of at least 3 screws penetrating each stud the panel crosses and at panel ends.
- D. Allow space for thermal movement between both ends of siding panels that butt against trim; seal joint between panel and trim with specified sealant.
- E. Joints in Horizontal Siding: Avoid joints in lap siding except at corners; where joints are inevitable stagger joints between successive courses.
- F. Joints in Vertical Siding: Install Z-flashing in horizontal joints between successive courses of vertical siding.
- G. Do not install siding less than 6 inches from surface of ground nor closer than 1 inch to roofs, patios, porches, and other surfaces where water may collect.
- H. After installation, seal all joints except lap joints of lap siding. Seal around all penetrations. Paint all exposed cut edges.

3.04 PROTECTION

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

END OF SECTION

SECTION 07 6200
SHEET METAL FLASHING AND TRIM

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Fabricated sheet metal items, including flashings, counter flashings.
- B. Sealants for joints within sheet metal fabrications.

1.02 REFERENCE STANDARDS

- A. ASTM B209 - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate; 2014.
- B. ASTM B209M - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate (Metric); 2014.
- C. ASTM C920 - Standard Specification for Elastomeric Joint Sealants; 2014a.
- D. ASTM D4586/D4586M - Standard Specification for Asphalt Roof Cement, Asbestos-Free; 2007 (Reapproved 2012).
- E. CDA A4050 - Copper in Architecture - Handbook; current edition.
- F. SMACNA (ASMM) - Architectural Sheet Metal Manual; 2012.

1.03 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Shop Drawings: Indicate material profile, jointing pattern, jointing details, fastening methods, flashings, terminations, and installation details.
- C. Samples: Submit two samples 4 by 4 inch in size illustrating metal finish color.

1.04 QUALITY ASSURANCE

- A. Perform work in accordance with SMACNA (ASMM) and CDA A4050 requirements and standard details, except as otherwise indicated.
- B. Fabricator and Installer Qualifications: Company specializing in sheet metal work with 5 years of documented experience.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Stack material to prevent twisting, bending, and abrasion, and to provide ventilation. Slope metal sheets to ensure drainage.
- B. Prevent contact with materials that could cause discoloration or staining.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Sheet Metal Flashing and Trim Manufacturers:
 - 1. Fairview Architectural LLC; VitraEdge :www.fairviewarchitecturalusa.com/sle.
 - 2. Petersen Aluminum Corporation; www.pac-clad.com/sle.

2.2 SHEET MATERIALS

- A. Aluminum: ASTM B209 (ASTM B209M); 20 gage, (0.032 inch) (0.81 mm) thick; anodized finish of color as selected.
- B. Pre-Finished Aluminum: ASTM B209 (ASTM B209M); 20 gage, (0.032 inch) (0.81 mm) thick;
 - 1. Color: As selected by Architect from manufacturer's standard colors.

2.03 FABRICATION

- A. Form sections true to shape, accurate in size, square, and free from distortion or defects.
- B. Form pieces in longest possible lengths.
- C. Hem exposed edges on underside 1/2 inch (13 mm); miter and seam corners.

- D. Form material with flat lock seams, except where otherwise indicated; at moving joints, use sealed lapped, bayonet-type or interlocking hooked seams.
- E. Fabricate corners from one piece with minimum 18 inch (450 mm) long legs; seam for rigidity, seal with sealant.
- F. Fabricate flashings to allow toe to extend 2 inches (50 mm) over roofing gravel. Return and brake edges.

2.04 ACCESSORIES

- A. Fasteners: Stainless steel, with soft neoprene washers.
- B. Primer: Zinc chromate type.
- C. Concealed Sealants: Non-curing butyl sealant.
- D. Exposed Sealants: ASTM C920; elastomeric sealant, with minimum movement capability as recommended by manufacturer for substrates to be sealed; color to match adjacent material.
- E. Plastic Cement: ASTM D4586/D4586M, Type I.
- F. Reglets: Recessed type, rigid extruded PVC.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify roof openings, curbs, pipes, sleeves, ducts, and vents through roof are solidly set, reglets in place, and nailing strips located.
- B. Verify roofing termination and base flashings are in place, sealed, and secure.

3.02 PREPARATION

- A. Install starter and edge strips, and cleats before starting installation.
- B. Back paint concealed metal surfaces with protective backing paint to a minimum dry film thickness of 15 mil (0.4 mm).

3.03 INSTALLATION

- A. Secure flashings in place using concealed fasteners, and use exposed fasteners only where permitted..
- B. Apply plastic cement compound between metal flashings and felt flashings.
- C. Fit flashings tight in place; make corners square, surfaces true and straight in planes, and lines accurate to profiles.

END OF SECTION

**SECTION 07 7120
GUTTERS & DOWNSPOUTS**

PART 1 – GENERAL

1.01 SECTION INCLUDES

- A. Aluminum gutters.
- B. Aluminum downspouts.
- C. Accessories.

1.02 SUBMITTALS

- A. Refer to Section 01 1300.
- B. Product Data: Submit manufacturer current technical literature for each type of product.
- C. Samples: Provide nominal 3 X 5 inch sample of each color indicated for aluminum gutters, downspouts and accessories.

1.03 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Manufacturer shall have a minimum of five (5) years experience in the production of aluminum gutters and downspouts.

1.04 DELIVERY, STORAGE AND HANDLING:

- A. Refer to Section 01600.
- B. Deliver materials and components in manufacturer's original unopened, undamaged packaging with identification labels intact.
- C. Store gutter and downspout materials on dry, level, firm, and clean surface.

1.05 WARRANTY

- A. Limited Warranty – Downspouts:
 - 1. Manufacturing Defects: Standard form in which manufacturer agrees to repair or replace items that fail by blistering, checks, crazes, flakes, peels or weathers unevenly due to a defect in manufacturing within warranty period from date of original installation.
 - 2. Warranty period: 50 years.
- B. Limited Warranty – Gutter Coil:
 - 1. Manufacturing Defects: Standard form in which manufacturer agrees to repair or replace items that fail by blistering, checks, crazes, flakes, peels or weathers unevenly due to a defect in manufacturing within warranty period from date of original installation.
 - 2. Warranty period: 20 years.

PART 2 – PRODUCTS

2.01 MANUFACTURER

- A. Mastic Home Exteriors by Ply Gem (800-788-1964) (www.mastic.com); 2600 Grand Boulevard, Suite 900; Kansas City, Missouri 64108.
 - 1. Product: Mastic "Performance Metals" Aluminum Gutters and Downspouts.
- B. Substitutions:
 - 1. Approved Equal.
 - 2. Requests for substitutions will be considered in accordance with provisions of Section 01 1600.

2.02 MATERIALS

- A. General:
 - 1. Formed and coated aluminum coil stock; 3105 H24 aluminum.
 - 2. Gutter Material Thickness: 0.032.
 - 3. Downspout Material Thickness: 0.019.

2.03 ALUMINUM GUTTERS

- A. Coil Stock:
 - 1. Provide a leaf guard gutter system equivalent to Englert Leaf Guard.

2. Gutter Size: (6) inches.
 3. Profile: Ogee.
 4. Texture: Smooth.
 5. Finish: AlumaCure 2000 (2) coat Acrylic Finish.
 6. Color: As selected from manufacturer's full color line.
- B. Accessories:
1. Gutter support:
 - a) Aluminum 6" Hidden Hanger (AMSHID).
 2. Miscellaneous Components: Provide all necessary inside and outside corners, corner reinforcing, eave tubes, and end caps required for a complete installation.

2.04 ALUMINUM DOWNSPOUTS

- A. Coil Stock:
1. Downspout Size: (3 by 4) inches.
 2. Profile: Rectangular.
 3. Texture: Corrugated.
 4. Finish: AlumaCure 2000 2 coat acrylic.
 5. Color: As selected from manufacturer's full color line.
- B. Accessories:
1. Downspout Support: Concealed bracket; mill finish.
 2. Miscellaneous Components: Provide all necessary elbows, downspouts offset sections, and pop rivets as required for a complete installation. All miscellaneous components shall match downspouts.
 3. Leaf Catcher as manufactured by Precision Gutters, or approved equal.

2.05 ACCESSORIES

- A. Fasteners:
1. Aluminum fasteners, as recommended by manufacturer, of sufficient length to penetrate minimum 1 inch into substrate.
 2. Size: As recommended by manufacturer.
- B. Flashing: Provide aluminum roof apron and fascia apron flashing; color as selected from manufacturer's full color line.
- C. Flashing: Provide aluminum flashing complying with Sheet Metal Flashing at gutter apron, drip edge, and where indicated.
- D. Sealants: Mildew-Resistant Joint Sealant as recommended by manufacturer at gutter joints.

PART 3 – EXECUTION

3.01 PREPARATION

- A. Verify that substances are in place and ready for installation of gutters and downspouts.

3.02 INSTALLATION

- A. General: Install gutters and downspouts per manufacturer's written installation instructions. Install Work securely in place and provide for expansion and contraction of components using lapped and sealed joints.
1. Do not install damaged components.
 2. Separate dissimilar metals to prevent galvanic action through the use of bituminous coating or other permanent separation recommended by SMACNA.
 3. Space expansion joints in gutters at a maximum of 50 foot centers.
 4. Rivet joints where required for strength, exposed rivet shall match gutter or downspout color.
 5. Torch cutting of components is not allowed.
- B. Install roof apron flashings at roof edge.
- C. Gutters:
1. Install gutter supports at no more than 36 inches on center.
 2. Slope gutters evenly to downspouts; provide end caps at gutter ends and seal watertight per manufacturer's instructions.

3. Install eave tubes at all downspout locations, seal watertight.
 4. Apply joint sealants at gutter joints per manufacturer's installation instructions and to meet the requirements of Section 07905 – Joint Sealers.
 5. Install gutter protection per manufacturer's instructions; provide factory fabricated corners at all inside and outside corners.
- D. Downspouts:
1. Install downspouts, provide elbows and offsets, and secure downspouts to wall construction using downspout supports spaced no more than 10 feet on center. Maximum distance of downspout support from top to bottom of downspout shall be 2 feet.
 2. Where downspout connects to building perimeter drainage system, lap downspout and perimeter drainage pipe a minimum 3 inches. At concrete perimeter drainage pipe, grout downspout in place, slope grout to shed rain away from downspout.

3.03 CLEANING AND PROTECTION:

- A. Remove damaged, defective or improperly installed materials. Replace with new materials installed per requirements of this section.
- B. Clean finished surfaces according to manufacturer's written instruction; maintain clean condition until Final Completion.

END OF SECTION

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SECTION 07 9200
JOINT SEALANTS - DOW SILICONES CORPORATION

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Nonsag gunnable joint sealants.
- B. Joint backings and accessories.

1.02 REFERENCE STANDARDS

- A. ASTM C794 - Standard Test Method for Adhesion-in-Peel of Elastomeric Joint Sealants; 2018 (Reapproved 2022).
- B. ASTM C920 - Standard Specification for Elastomeric Joint Sealants; 2018.
- C. ASTM C1087 - Standard Test Method for Determining Compatibility of Liquid-Applied Sealants with Accessories Used in Structural Glazing Systems; 2023.
- D. ASTM C1193 - Standard Guide for Use of Joint Sealants; 2016 (Reapproved 2023).
- E. ASTM C1248 - Standard Test Method for Staining of Porous Substrate by Joint Sealants; 2022.
- F. ASTM C1521 - Standard Practice for Evaluating Adhesion of Installed Weatherproofing Sealant Joints; 2019 (Reapproved 2020).
- G. SCAQMD 1168 - Adhesive and Sealant Applications; 1989, with Amendment (2022).

1.03 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements for submittal procedures.
- B. Product Data for Joint Sealants: Submit manufacturer's technical datasheets for each product to be used, and 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 that product is not compatible with.
- C. Preconstruction Laboratory Test Reports: Submit at least four weeks prior to start of installation.
- D. Executed warranty.

1.04 QUALITY ASSURANCE

- A. Maintain one copy of each referenced document covering installation requirements on site.
- B. Preconstruction Laboratory Testing: Arrange for sealant manufacturer(s) to test each combination of sealant, substrate, backing, and accessories.
 - 1. Adhesion Testing: In accordance with ASTM C794.
 - 2. Compatibility Testing: In accordance with ASTM C1087.
 - 3. Allow sufficient time for testing to avoid delaying the work.
 - 4. Deliver sufficient samples to manufacturer for testing.
 - 5. Report manufacturer's recommended corrective measures, if any, including primers or techniques not indicated in product data submittals.
- C. Field Adhesion Test Procedures:
 - 1. Allow sealants to fully cure as recommended by manufacturer before testing.
 - 2. Have a copy of the test method document available during tests.
 - 3. Record the type of failure that occurred, other information required by test method, and the information required on the Field Quality Control Log.
 - 4. If any combination of sealant type and substrate does not show evidence of minimum adhesion or shows cohesion failure before minimum adhesion, report results to Architect.

1.05 WARRANTY

- A. See Section 01 7800 - Closeout Submittals for additional warranty requirements.
- B. Manufacturer Warranty: Provide 2-year manufacturer warranty for installed sealants and accessories that fail to achieve a watertight seal, exhibit loss of adhesion or cohesion, or do not cure. Complete forms in Owner's name and register with manufacturer.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Joint Sealants:
 - 1. Dow Silicones Corporation: www.dow.com/#sle.
 - 2. Substitutions: See Section 01 6000 - Product Requirements.

2.02 JOINT SEALANT APPLICATIONS

- A. Scope:
 - 1. Exterior Joints: Seal open joints, whether or not the joint is indicated on drawings unless specifically indicated not to be sealed. Exterior joints to be sealed include, but are not limited to:
 - a. Wall expansion and control joints.
 - b. Joints between door, window, and other frames and adjacent construction.
 - c. Joints between different exposed materials.
 - d. Openings below ledge angles in masonry.
 - e. Other joints are indicated below.
 - 2. Do not seal the following types of joints:
 - a. Intentional weep holes in masonry.
 - b. Joints indicated to be treated with manufactured expansion joint cover or some other type of sealing device.
 - c. Joints where sealant is specified to be provided by manufacturer of product to be sealed.
 - d. Joints where installation of sealant is specified in another section.
 - e. Joints between suspended panel ceilings/grid and walls.
- B. Exterior Joints: Use nonsag nonstaining silicone sealant, unless otherwise indicated.
- C. Joints in EIFS: Sikasil WS295, as manufactured by Sika Corporation, Lyndhurst, New Jersey
Backer Rod: Closed cell, dense, polyethylene, extruded rod.

2.03 JOINT SEALANTS - GENERAL

2.04 NONSAG JOINT SEALANTS

- A. Nonstaining Silicone Sealant: ASTM C920, Grade NS, Uses M and A; not expected to withstand continuous water immersion or traffic.
 - 1. Movement Capability: Plus and minus 50 percent, minimum.
 - 2. Porous Stone: Nonstaining to light-colored natural stone when tested in accordance with ASTM C1248.
 - 3. Dirt Pick-Up: Reduced dirt pick-up compared to other silicone sealants.
 - 4. Color: To be selected by Architect from manufacturer's standard range.
 - 5. Products:

2.05 ACCESSORIES

- A. Backer Rod: Cylindrical cellular foam rod with surface that sealant will not adhere to, compatible with specific sealant used, and recommended by backing and sealant manufacturers for specific application.

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. Verify that backer rods are of the correct size.

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. Install bond breaker backing tape where backer rod cannot be used.
- D. Install sealant free of air pockets, foreign embedded matter, ridges, and sags, and without getting sealant on adjacent surfaces.
- E. 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.
- F. Nonsag Sealants: Tool surface concave, unless otherwise indicated; remove masking tape immediately after tooling sealant surface.

END OF SECTION

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SECTION 08 4313
ALUMINUM-FRAMED STOREFRONTS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Aluminum-framed storefront, with vision glass.

1.2 REFERENCE STANDARDS

- A. AAMA CW-10 - Care and Handling of Architectural Aluminum From Shop to Site; 2015.
- B. AAMA 609 & 610 - Cleaning and Maintenance Guide for Architecturally Finished Aluminum (Combined Document); 2015.
- C. AAMA 611 - Voluntary Specification for Anodized Architectural Aluminum; 2012.
- D. ASTM B221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes; 2013.
- E. ASTM B221M - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes [Metric]; 2013.

1.3 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide component dimensions, describe components within assembly, anchorage and fasteners, glass and infill, internal drainage details
- C. Shop Drawings: Indicate system dimensions, framed opening requirements and tolerances, affected related Work, expansion and contraction joint location and details, and field welding required.
- D. Samples: Submit two samples 6x6 inches in size illustrating finished aluminum surface, glass, glazing materials.
- E. Design Data: Provide framing member structural and physical characteristics, engineering calculations, and dimensional limitations.
- F. Hardware Schedule: Complete itemization of each item of hardware to be provided for each door, cross-referenced to door identification numbers in Contract Documents.
- G. Warranty: Submit manufacturer warranty and ensure forms have been completed in Owner's name and registered with manufacturer.

1.4 QUALITY ASSURANCE

- A. Designer Qualifications: Design structural support framing components under direct supervision of a Professional Structural Engineer experienced in design of this Work and licensed at the State in which the Project is located.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Handle products of this section in accordance with AAMA CW-10.
- B. Protect finished aluminum surfaces with wrapping. Do not use adhesive papers or sprayed coatings that bond to aluminum when exposed to sunlight or weather.

1.6 FIELD CONDITIONS

- A. Do not install sealants when ambient temperature is less than 40 degrees F. Maintain this minimum temperature during and 48 hours after installation.

1.7 WARRANTY

- A. See Section 01 7800 - Closeout Submittals, for additional warranty requirements.
- B. Correct defective Work within a five year period after the Date of Substantial Completion.
- C. Provide five year manufacturer warranty against failure of glass seal on insulating glass units, including interpane dusting or misting. Include provision for replacement of failed units.
- D. Provide five year manufacturer warranty against excessive degradation of exterior finish. Include provision for replacement of units with excessive fading, chalking, or flaking.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Aluminum-Framed Storefront and Doors:
 - 1. Kawneer North America; Kawneer Trifab 451UT, Basis for design: www.kawneer.com.
 - 2. Tubelite: T14000
 - 3. Substitutions: See Section 01 6000 - Product Requirements.

2.2 STOREFRONT

- A. Aluminum-Framed Storefront: Factory fabricated, factory finished aluminum framing members with infill, and related flashings, anchorage and attachment devices.
 - 1. Glazing Rabbet: For 1 inch insulating glazing.
 - 2. Glazing Position: Centered (front to back).
 - 3. Finish: Superior performing organic coatings.
 - a. Factory finish all surfaces that will be exposed in completed assemblies.
 - b. Touch-up surfaces cut during fabrication so that no natural aluminum is visible in completed assemblies, including joint edges.
 - 4. Finish Color: As selected by Architect from manufacturer's standard line.
 - 5. Fabrication: Joints and corners flush, hairline, and weatherproof, accurately fitted and secured; prepared to receive anchors and hardware; fasteners and attachments concealed from view; reinforced as required for imposed loads.
 - 6. Construction: Eliminate noises caused by wind and thermal movement, prevent vibration harmonics, and prevent "stack effect" in internal spaces.
 - 7. System Internal Drainage: Drain to the exterior by means of a weep drainage network any water entering joints, condensation occurring in glazing channel, and migrating moisture occurring within system.
 - 8. Expansion/Contraction: Provide for expansion and contraction within system components caused by cycling temperature range of 170 degrees F over a 12 hour period without causing detrimental effect to system components, anchorages, and other building elements.
 - 9. Movement: Allow for movement between storefront and adjacent construction, without damage to components or deterioration of seals.
 - 10. Perimeter Clearance: Minimize space between framing members and adjacent construction while allowing expected movement.

2.3 COMPONENTS

- A. Aluminum Framing Members: Tubular aluminum sections, thermally broken with interior section insulated from exterior, drainage holes and internal weep drainage system.
 - 1. Glazing Stops: Flush.
 - 2. Cross-Section: As indicated on drawings. Provide historical aluminum trim profiles as indicated on drawings.

2.4 MATERIALS

- A. Extruded Aluminum: ASTM B221 (ASTM B221M).
- B. Structural Supporting Anchors Attached to Structural Steel: Design for bolted attachment.
- C. Fasteners: Galvanized steel.
- D. Glazing Gaskets: Type to suit application to achieve weather, moisture, and air infiltration requirements.

2.5 FINISHES

- A. Class I Color Anodized Finish: AAMA 611 AA-M12C22A42 Integrally colored anodic coating not less than 0.7 mils thick.
- B. Color: As selected by Architect from manufacturer's standard range.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify dimensions, tolerances, and method of attachment with other work.
- B. Verify that wall openings and adjoining air and vapor seal materials are ready to receive work of this section.

3.2 INSTALLATION

- A. Install wall system in accordance with manufacturer's instructions.
- B. Attach to structure to permit sufficient adjustment to accommodate construction tolerances and other irregularities.
- C. Provide alignment attachments and shims to permanently fasten system to building structure.
- D. Align assembly plumb and level, free of warp or twist. Maintain assembly dimensional tolerances, aligning with adjacent work.
- E. Provide thermal isolation where components penetrate or disrupt building insulation.
- F. Install sill flashings. Turn up ends and edges; seal to adjacent work to form water tight dam.
- G. Where fasteners penetrate sill flashings, make watertight by seating and sealing fastener heads to sill flashing.
- H. Pack fibrous insulation in shim spaces at perimeter of assembly to maintain continuity of thermal barrier.
- I. Set thresholds in bed of sealant and secure.
- J. Install hardware using templates provided.
- K. Touch-up minor damage to factory applied finish; replace components that cannot be satisfactorily repaired.

3.3 TOLERANCES

- A. Maximum Variation from Plumb: 0.06 inches every 3 ft non-cumulative or 1/16 inches per 10 ft, whichever is less.
- B. Maximum Misalignment of Two Adjoining Members Abutting in Plane: 1/32 inch.

3.4 FIELD QUALITY CONTROL

- A. See Section 01 4000 - Quality Requirements, for independent testing and inspection requirements. Inspection will monitor quality of installation and glazing.

3.5 CLEANING

- A. Remove protective material from pre-finished aluminum surfaces.
- B. Upon completion of installation, thoroughly clean aluminum surfaces in accordance with AAMA 609 & 610.

3.7 PROTECTION

- A. Protect installed products from damage during subsequent construction.

END OF SECTION

**SECTION 08 5113
ALUMINUM WINDOWS**

PART 1 - GENERAL

1.1 SCOPE OF WORK

- A. Aluminum windows.
- B. Factory-installed glass & glazing

1.2 RELATED SECTIONS

- A. Section 07 9200 - Joint Sealants
- B. Section 08 4313 – Aluminum Framed Storefronts

1.3 REFERENCES

- A. AAMA - American Architectural Manufacturers Association:
 - 1. AAMA/WDMA/CSA 101/I.S.2/A440-08 "North American Fenestration Standard/Specification for Windows, Doors, and Skylights"
 - 2. AAMA 502-12 - Voluntary Specification for Field Testing of Newly Installed Fenestration Products.
 - 3. AAMA 611-98 - Voluntary Specification for Anodized Architectural Aluminum
 - 4. AAMA 701/702-04 - Voluntary Specification for Pile Weatherstripping and Replaceable Fenestration Weatherseals.
 - 5. AAMA 800-05 - Voluntary Specifications and Test Methods for Sealants.
 - 6. AAMA 902-99 - Voluntary Specification for Sash Balances.
 - 7. AAMA 910-93 - Voluntary Life Cycle' Specifications and Test Methods for Architectural Grade Windows and Sliding Glass Doors.
 - 8. AAMA 1503-98 - Voluntary Test Method for Thermal Transmittance and Condensation Resistance of Windows, Doors, and Glazed Wall Sections.
 - 9. AAMA 2603-02 - Voluntary Specification, Performance Requirements and Test Procedures for Pigmented Organic Coatings on Aluminum Extrusions and Panels.
 - 10. AAMA 2604-05 - Voluntary Specification, Performance Requirements and Test Procedures for High Performance Organic Coatings on Aluminum Extrusions and Panels.
 - 11. AAMA 2605-05 - Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels
- B. ASTM – American Society for Testing and Materials:
 - 1. ASTM C 1036-06 - Standard Specification for Flat glass.
 - 2. ASTM C 1048-04 - Standard Specification for Heat-Treated Flat Glass – Kind HS, Kind FT Coated and Uncoated Glass Flat glass.
 - 3. ASTM C 1172-03 - Standard Specification for Laminated Architectural Flat Glass.
 - 4. ASTM E283-04 - Standard Test Method for Determining Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen.
 - 5. ASTM E330-02 - Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights, and Curtain Walls by Uniform Static Air Pressure Difference.
 - 6. ASTM E331-00 - Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference.
 - 7. ASTM E547-00 - Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Cyclic Static Air Pressure Differential.
 - 8. ASTM F588-07 - Standard Test Methods for Measuring the Forced Entry Resistance of Window Assemblies, Excluding Glazing Impact
 - 9. ASTM E2190-02 - Standard Specification for Insulating Glass Unit Performance and Evaluation.

- C. NFRC - National Fenestration Rating Council.
 - 1. NFRC 100-2020 - Procedure for Determining Fenestration Product U Factors.
 - 2. NFRC 102-2020 - Procedure for Measuring the Steady-State Thermal Transmittance of Fenestration Systems.
 - 3. NFRC 200-2020 - Procedure for Determining Fenestration Product Solar Heat Gain Coefficient and Visible Transmittance at Normal Incidence
 - 4. NFRC 500-2020 - Procedure for Determining Fenestration Product Condensation Resistance Values.
- D. U.S. Consumer Product Safety Commission (CPSC) Publications
 - 1. 16 CFR 1201 Safety Standard for Architectural Glazing Materials.

1.4 SUBMITTALS

- A. Submit administrative requirements under provisions of Section 01 3000.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
 - 1. Preparation instructions and recommendations.
 - 2. Storage and handling requirements and recommendations.
 - 3. Installation methods.
- C. Shop Drawings:
 - 1. Elevation for each style window specified indicating its size, glazing type, muntin type and design.
 - 2. Manufacturer's head, jamb and sill details and section views for each window type specified.
- D. Schedules:
 - 1. Provide a window schedule indicating the type, size, color, and operation of each unit specified. Coordinate with window mark types found in the Contract Drawings.
- E. Selection Samples: For each finish product specified, two complete sets of color chips representing manufacturer's full range of available colors and patterns.
- F. Verification Samples: For each finish product specified, samples may be subsequently installed on the project.
- G. Test Reports: Submit certified independent testing agency reports indicating window units meet or exceed specified performance requirements.

1.5 SYSTEM DESCRIPTION

- A. Operation: DOUBLE HUNG with TILT-IN SASH for cleaning
- B. AAMA Rating: Class CW-PG50-H when tested according to AAMA/WDMA/CSA 101/I.S.2/A440-08 at the gateway size of 56" x 91"
- C. Construction: 3 1/4 inch frame depth. Wall thickness: 0.062"/0.078" frame/sill; 0.062" sash. Factory finished extruded aluminum frame and sash members with integral structural polyurethane thermal break.
- D. Glazing: 7/8 inch insulating glass; black reusable flexible PVC channel gasket;

1.6 HARDWARE:

- A. Balances:

1. Balances shall provide a positive lifting force through the full range of sash travel. Sash travel shall be limited on oversize units.
 2. When properly adjusted, balances shall hold the sash stationary at any open position.
 3. Balances shall be factory calibrated of type Spiral (or Ultra-Lift balance or Block and Tackle)
- B. Meeting Rail Lock(s): White or Black painted zinc alloy sweep lock fastened at meeting rail with two self-tapping screws.
- C. Head Lock: Automatic aluminum spring-loaded head lock shall secure top sash in closed position.
- D. Tilt latches: Custodial-operated locking tamper-proof tilt latches
- E. Lift Handles: Integral continuous lift handles on bottom sash.
- F. Limit Stops: Jamb-mounted limit stops.

1.7 WEATHERSTRIPPING:

- A. Sash: High-density woven pile shall be used in combination with continuous polyethylene rigid seal to minimize air infiltration.
- B. Securely stake and join at corners. Provide drainage to exterior as necessary.

1.8 PERFORMANCE REQUIREMENTS

- A. Air, Water and Structural Performance Requirements:

When tested in accordance with cited test procedures, windows shall meet or exceed the following performance criteria, as well as those indicated in AAMA/WDMA/CSA 101/I.S.2/A440-08 for performance grade of unit specified unless otherwise noted herein.

1. Air Test Performance Requirements:
 - a. Performance: Air infiltration maximum 0.30 cfm per square foot at 1.57 psf pressure differential when tested in accordance with ASTM E283 for sliding sealed products.
2. Water Test Performance Requirements:
 - a. No uncontrolled water leakage at 9.00 psf static pressure differential when tested in accordance with ASTM E331 and ASTM E547.
3. Structural Test Performance Requirements:
 - a. Uniform Load Deflection Test
 - 1) Not deflection of any unsupported span L of test unit (framing rails, muntins, mullions, etc.) in excess of L/175 at both a positive and negative load of design test pressure when tested in accordance with ASTM E330.
 - 2) Structural reinforcing that is not standard on units being furnished is not allowed.
 - b. Uniform Load Structural Test:
 - 1) Unit to be tested at 1.5 x design test pressure, both positive and negative, acting normal to plane of wall in accordance with ASTM E330.
 - 2) No glass breakage; permanent damage to fasteners, hardware parts, or anchors; damage to make windows inoperable; or permanent deformation of any main frame or ventilator member in excess of 0.2% of its clear span.
- B. Forced Entry Resistance Test: ASTM F588, Type and Grade as indicated for each Product.
- C. Thermal Performance Requirements
 1. Perform thermal computer simulation in accordance with the configuration specified in NFRC

- 100, NFRC 200, NFRC 500.
2. Computed Thermal Transmittance (U-Value) shall not exceed (value determined based on glazing element) BTU/hr/sq.ft./°F for the whole window assembly.
 3. Computed Solar Heat Gain Coefficient (SHGC) shall not exceed (value determined based on glazing element) for the whole window assembly.

1.9 QUALITY ASSURANCE

- A. Manufacturer Qualifications: All windows specified in this section shall be supplied by a manufacturer which has been fabricating/manufacturing commercial grade aluminum windows of similar quality and performance for a minimum of ten (10) years.
- B. Installer Qualifications: All products listed in this section are to be installed by a single installer with a minimum of five (5) years demonstrated experience in installing windows of the same type and scope as specified, preferably AAMA certified installers.
- C. Provide test reports from AAMA accredited laboratory certifying that window units are found to be in compliance with AAMA/WDMA/CSA 101/I.S.2/A440-08 and performance standards listed above.
 1. Test reports shall be accompanied by verified "Notice of Product Certification" to assure product is active and currently listed at third party validation (NAMI) accredited by the American National Standards Institute (ANSI)
 2. All testing shall be conducted using AAMA/WDMA/CSA 101/I.S.2/A440-08 Gateway Performance minimum specified test sizes.

1.10 DELIVERY, STORAGE, AND HANDLING

- A. Store products in manufacturer's unopened packaging until ready for installation in accordance with manufacturer's recommendations.
- B. Protect units against damage from the elements, construction activities and other hazards before, during, and after installation.

1.11 PROJECT CONDITIONS

- A. 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.

1.08 WARRANTIES

- A. Manufacturer's Warranty: Manufacturer agrees to repair or replace aluminum windows that fail in materials or workmanship within specified warranty period.
 1. Failures include, but are not limited to, the following:
 - a. Failure to meet performance requirements.
 - b. Structural failures including excessive deflection, water leakage, and air infiltration.
 - c. Faulty operation of movable sash and hardware.
 - d. Deterioration of materials and finishes beyond normal weathering.
 - e. Failure of insulating glass.
 2. Warranty Period:
 - a. Window material: 10 years from date of Substantial Completion.
 - b. Glazing Units, Non-Laminated: 20 years from date of Substantial Completion.

PART 2- PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer: **Crystal Window & Door Systems, Ltd.**, which is located at: 31-10 Whitestone Expressway, Flushing, NY 11354; Tel: 718. 961.7300; Tel: 800. 472.9988; Fax: 718.460.4594; Web: www.crystalwindows.com :

Basis of Design: Series 2000A Aluminum Thermal-Break Tilt Windows

- B. Requests for substitutions will be considered in accordance with provisions of Section 01 6000.

2.2 Aluminum:

- A. Extruded aluminum prime billet 6063-T5 or 6063-T6 alloy for primary components; 6063-T5, 6063-T6, or 6061-T6 for structural components; all meeting the requirements of ASTM B221.
- B. Aluminum sheet alloy 5005 H 32 (for anodic finish), meeting the requirements of ASTM B209 or alloy 3003 H 14 (for painted or unfinished sheet).

2.3 Thermal Barrier:

- A. Structural Thermal Barrier:
1. Structural thermal barrier shall consist of poured-in-place polyurethane polymer that shall transfer shear during bending and provide composite action between frame components.
- B. Non Structural Thermal Barriers:
1. Non structural thermal barriers are used only in conjunction with structural thermal barriers. The purpose of non structural thermal barriers is to enhance thermal performance of the primary structural thermal barriers by inhibiting heat transfer through thermal radiation and convection. Non structural thermal barriers shall not be used as primary load carrying members.
 2. Rigid non structural thermal barriers shall be constructed of extruded polyvinylchloride (PVC).

2.4 GLASS

- A. Glazing Materials:
1. Vertical Glazing: For glass surfaces sloped 15 degrees or less from vertical. Design glass to resist design wind pressure based on glass type factors for short-duration load.
 2. Thickness: Where glass thickness is indicated, it is a minimum. Provide glass lites in thicknesses as needed to comply with requirements indicated.
 3. Strength: Where float glass is indicated, provide annealed float glass. Where fully tempered glass is indicated, provide Kind FT heat-treated float glass.
 4. Thermal and Optical Performance Properties: Provide glass with performance properties specified, as indicated in manufacturer's published test data, based on procedures indicated.
 - a. U-Factors: Total-glazing values, according to NFRC 100 and based on LBL's WINDOW 7.4 computer program, expressed as BTU/sq.ft x h x deg F (W/sq. m x K).
 - b. Solar Heat-Gain Coefficient and Visible Transmittance: Center-of-glazing values, according to NFRC 200 and based on LBL's WINDOW 7.4 computer program.
 - c. Visible Reflectance: Center-of-glazing values, according to NFRC 300.
 5. Float Glass: ASTM C 1036, Type 1, Quality-Q3, Class 1 (clear) unless otherwise indicated.
 6. Coated Glass: ASTM C 1376, Type 1, Quality-Q3, Class 1 (clear) unless otherwise indicated, of kind and condition indicated.
 7. Laminated Glass: ASTM C 1172, Type 1, Quality-Q3, Class 1 (clear) unless otherwise indicated, of kind and condition indicated.

B. Insulating Glass Units:

1. Factory-assemble units consisting of sealed lites of glass separated by a PPG Intercept Spacer system consisting of a one-piece, metallic, U-channel design that creates an effective thermal barrier to help reduce conducted heat loss through the window.
2. Insulating glass units shall be sealed with an integral dessicant matrix and a butyl sealant extruded around the entire perimeter of the spacer to achieve a seal. The sealant applied is to be Dual Seal Equivalent (DSE). Interspace to be filled with air or argon gas as required by thermal computer simulation.
3. Insulating Glass Types: Low-E coated, insulating glass units.
 - a. Overall Unit Thickness: 7/8" (22mm)
 - b. Thickness of Each Glass Lite: 3/32", 1/8", 3/16" or 1/4 inch
 - c. Outdoor Lite: Class 1 (Clear) float glass, fully tempered float glass or laminated glass
 - d. Interspace Content: Air or Argon Gas.
 - e. Indoor Lite: Class 1 (Clear) float glass, or fully tempered float glass or laminated glass
 - f. Low-E Coating: Sputtered on second or third surface, pyrolitic on fourth surface
 - g. Glass Winter Night time U-Value: 0.26 maximum.
 - h. Solar Heat Gain Coefficient: 0.46 maximum.
 - i. Provide safety glazing labeling, if necessary.

2.5 WINDOW ACCESSORIES

Provide the following accessories as specified in the contract drawings. Finish to match window frames or as selected by the Architect:

- A. Wrap Around Panning
- B. Preset Panning
- C. Snap Trim/Clips
- D. Expanders
- E. Receptors
- F. Subsills and Subsill Anchors
- G. Mullions and Mullion Covers
- H. Exterior Sills
- I. Interior Stools
- J. Muntins

2.6 FINISHES

- A. Conforming to AAMA 2604-05 specification, finish on all extruded aluminum shall consist of zero or near-zero VOC, organic POWDER COAT with a baked on super-durable thermosetting polyester resin, electro-statically applied on five-stage pre-treated aluminum surface. Equivalent to 50% Kynar polyvinylidene fluoride liquid paint finishes. Powder coat material to be as manufactured by Sherwin Williams or PPG Powder Coatings.
- B. Color to be selected from Manufacturer's Standard Color Chart (or custom-matched as required by project Architect/Owner).

2.7 Insect Screens:

- A. Screen frames shall consist of tubular extruded aluminum profiles with finish to match window frames.
- B. Fiberglass mesh (18 X 16) with PVC spline.

2.8 Steel components including attachment fasteners shall be 300 series stainless steel except as noted.

2.9 Thermoplastic or thermo-set plastic caps, housings and other components shall be injection-molded nylon, extruded PVC, or other suitable compound.

2.10 Sealants:

- A. Sealants shall comply with applicable provisions of AAMA 800 and/or Federal Specifications FS-TT-001 and 002 Series.
- B. Frame joinery sealants shall be suitable for application specified and as tested and approved by window manufacturer.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Do not begin installation until substrates have been properly prepared.
- B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.3 INSTALLATION

- A. Install in accordance with manufacturer's instructions.

3.4 ANCHORAGE

- A. Anchor window units and/or assemblies sufficiently to maintain permanent positions when subjected to normal thermal movement, specified building movement and specified wind loads.

3.5 PROTECTION

- A. Protect installed products until completion of project.
- B. Final operating adjustment shall be made after glazing work is complete. Operating sash and ventilator shall operate smoothly and shall be weather tight when in locked position
- C. Touch-up, repair or replace damaged products before Substantial Completion.

3.6 DISPOSAL OF DEBRIS

- A. Remove all garbage off site and legally dispose of existing windows and debris generated from the installation of the new windows.

3.7 FIELD TESTING

- A. Testing Agency: Engage a qualified testing agency to perform tests and inspection
 - 1. Testing and inspecting agency will interpret tests and state in each report whether tested work complies with or deviates from requirements.
- B. Testing Services: Testing and inspecting of installed windows shall take place as follows:
 - 1. Testing Methodology: Testing of windows for air infiltration and water resistance shall be performed according to AMA 502.
 - 2. Air-Infiltration Testing:
 - a. Test Pressure: That required to determine compliance with AAMA/WDMA/CSA 101/1.S.2/A440 performance class indicated.
 - b. Allowable Air-Leakage Rate: 1.5 times the applicable AMA/WDMA/CSA 101/1.S.2/A440 rate for product type and performance class rounded down to one decimal place.
 - 3. Water-Resistance Testing:
 - a. Test Pressure: Two-thirds times test pressure required to determine compliance with AAMA/WDMA/CSA 101/1.S.2/A440 performance grade indicated.
 - b. Allowable Water Infiltration: No water penetration.
 - 4. Testing Extent: Three windows of each type as selected by Architect and a qualified independent testing and inspecting agency. Windows shall be tested after perimeter sealants have cured.
 - 5. Test Reports: Prepared according to AAMA 502.
- C. Windows will be considered defective if they do not pass tests and inspections.
- D. Prepare test and inspection reports.

3.8 ADJUSTMENT AND CLEAN UP

- A. Adjust all products, sash, vents, and hardware after installation, as necessary to provide proper operation and a weather tight installation
- B. Remove any labels and dirt from the window.

END OF SECTION

SECTION 08 9100 LOUVERS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Louvers, frames, and accessories.

1.02 RELATED REQUIREMENTS

- A. Section 07 6200 - Sheet Metal Flashing and Trim.
- B. Section 07 9200 - Joint Sealants: Sealing joints between frames and adjacent construction.

1.03 REFERENCE STANDARDS

- A. AAMA 611 - Voluntary Specification for Anodized Architectural Aluminum; 2020.
- B. AMCA 511 - Certified Ratings Program Product Rating Manual for Air Control Devices; 2021, with Editorial Revision (2022).
- C. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process; 2023.
- D. ASTM B221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes; 2021.
- E. ASTM B221M - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes (Metric); 2021.

1.04 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements for submittal procedures.
- B. Product Data: Provide data describing design characteristics, maximum recommended air velocity, design free area, materials and finishes.
- C. Samples: Submit two samples 2 by 2 inches (50 by 50 mm) in size illustrating finish and color of exterior and interior surfaces.

1.05 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing products of the type specified in this section, with minimum three years of documented experience.

1.06 WARRANTY

- A. See Section 01 7800 - Closeout Submittals for additional warranty requirements.
- B. Provide five year manufacturer's warranty against distortion, metal degradation, and connection failures of louver components.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Louvers:
 - 1. Airolite Company, LLC; www.airolite.com/#sle.
 - 2. Construction Specialties, Inc; Acoustical Louver: www.c-sgroup.com/#sle.
 - 3. Ruskin Company; Louvers: www.ruskin.com/#sle.
 - 4. Substitutions: See Section 01 6000 - Product Requirements.

2.02 LOUVERS

- A. Louvers: Factory fabricated and assembled, complete with frame, mullions, and accessories; AMCA Certified in accordance with AMCA 511.
 - 1. Drainable Blades: Continuous rain stop at front or rear of blade aligned with vertical gutter recessed into both jambs of frame.

2.03 MATERIALS

- A. Extruded Aluminum: ASTM B221 (ASTM B221M)

2.04 FINISHES

- A. Class I Color Anodized Finish: AAMA 611 AA-M12C22A44 Electrolytically deposited colored anodic coating not less than 0.7 mils (0.018 mm) thick. Color to be selected by owner and architect from manufacturer's standard Class I Color Anodized standard colors.

2.05 ACCESSORIES

- A. Blank-Off Panels: Aluminum face and back sheets, polyisocyanurate foam core, 1-1/2 inch (38 mm) thick, painted black on exterior side; provide where duct connected to louver is smaller than louver frame, sealing off louver area outside duct.
- B. Head and Sill Flashings: See Section 07 6200.
- C. Sealant for Setting Sills and Sill Flashing: Non-curing butyl type.
- D. Bird Screens to be 5/8" (15.9mm) mesh, 0.050" (1.27mm) thick expanded and flattened aluminum bird screen secured within 0.055" (1.40mm) thick extruded aluminum frames. Frames to have mitered corners and corner locks.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that prepared openings and flashings are ready to receive this work and opening dimensions are as indicated on shop drawings.
- B. Verify that field measurements are as indicated.

3.02 INSTALLATION

- A. Install louver assembly in accordance with manufacturer's instructions.
- B. Coordinate with installation of flashings by others.
- C. Install louvers level and plumb.
- D. Align louver assembly to ensure moisture shed from flashings and diversion of moisture to exterior.
- E. Secure louver frames in openings with concealed fasteners.

3.03 CLEANING

- A. Strip protective finish coverings.
- B. Clean surfaces and components.

END OF SECTION

**GYPSUM BOARD
SECTION 09 2900**

PART 1 - GENERAL

1.01. RELATED DOCUMENTS

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

1.02. SUMMARY

- A. This Section includes the following:
 - 1. Interior gypsum board.

1.03. SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Samples: For the following products:
 - 1. Trim Accessories: Full-size Sample in 12-inch- (300-mm-) long length for each trim accessory indicated.

1.04. STORAGE AND HANDLING

- A. Store materials inside under cover and keep them dry and protected against damage from weather, condensation, direct sunlight, construction traffic, and other causes. Stack panels flat to prevent sagging. In addition, follow the guidelines found in GA-801.

1.05. PROJECT CONDITIONS

- A. Environmental Limitations: Comply with ASTM C 840 or GA-216 requirements, whichever are more stringent.
- B. Do not install interior products until installation areas are enclosed and conditioned.
- C. Do not install panels that are wet, those that are moisture damaged, and those that are mold damaged.
 - 1. Indications that panels are wet or moisture damaged include, but are not limited to, discoloration, sagging, or irregular shape.
 - 2. Indications that panels are mold damaged include, but are not limited to, fuzzy or splotchy surface contamination and discoloration.

PART 2 - PRODUCTS

2.01. PANELS, GENERAL

- A. Size: Provide maximum lengths and widths available that will minimize joints in each area and that correspond with support system indicated.

2.02. INTERIOR GYPSUM BOARD

- A. General: Complying with ASTM C 1396/C1396M as applicable to type of gypsum board indicated.
 - 1. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. American Gypsum Company
- B. Type X:
 - 1. Thickness: 5/8 inch (15.9 mm).
 - 2. Long Edges: Tapered.
 - 3. Acceptable Product: FireBloc Type X Gypsum Wallboard

2.03. TRIM ACCESSORIES

- A. Interior Trim: ASTM C 1047.
 - 1. Material: Galvanized or aluminum-coated steel sheet, rolled zinc, plastic, or paper-faced galvanized steel sheet.

2. Shapes:
 - a. Cornerbead.
 - b. Bullnose bead.
 - c. LC-Bead: J-shaped; exposed long flange receives joint compound.
 - d. L-Bead: L-shaped; exposed long flange receives joint compound.
 - e. U-Bead: J-shaped; exposed short flange does not receive joint compound.
 - f. Expansion (control) joint.
 - g. Curved-Edge Cornerbead: With notched or flexible flanges.

2.04. JOINT TREATMENT MATERIALS

- A. General: Comply with ASTM C 475/C 475M.
- B. Joint Tape:
 1. Interior Gypsum Wallboard: Paper.
- C. Joint Compound for Interior Gypsum Wallboard: For each coat use formulation that is compatible with other compounds applied on previous or for successive coats.
 1. Prefilling: At open joints, rounded or beveled panel edges, and damaged surface areas, use setting-type taping compound.
 2. Embedding and First Coat: For embedding tape and first coat on joints, fasteners, and trim flanges, use drying-type or setting-type taping compound.
 - a. Use drying-type or setting-type compound for installing paper-faced metal trim accessories.
 3. Fill Coat: For second coat, use drying-type or setting-type, sandable topping compound.
 4. Finish Coat: For third coat, use drying-type or setting-type, sandable topping compound.

2.05. AUXILIARY MATERIALS

- A. General: Provide auxiliary materials that comply with referenced installation standards and manufacturer's written recommendations.
- B. Laminating Adhesive: Adhesive or joint compound recommended for directly adhering gypsum panels to continuous substrate.
 1. Use adhesives that have a VOC content of 50 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).
- C. Steel Drill Screws: ASTM C 1002, unless otherwise indicated.
 1. Use screws complying with ASTM C 954 for fastening panels to steel members from 0.033 to 0.112 inch (0.84 to 2.84 mm) thick.
 2. For fastening cementitious backer units, use screws of type and size recommended by panel manufacturer.

PART 3 - EXECUTION

3.01. EXAMINATION

- A. Examine areas and substrates, with Installer present, and including welded hollow-metal frames and framing, for compliance with requirements and other conditions affecting performance.
- B. Examine panels before installation. Reject panels that are wet, moisture damaged, and mold damaged.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.02. APPLYING AND FINISHING PANELS, GENERAL

- A. Comply with ASTM C 840, GA-216 or GA-214.
- B. Install panels with face side out. Butt panels together for a light contact at edges and ends with not more than 1/16 inch (1.5 mm) of open space between panels. Do not force into place.
- C. Locate edge and end joints over supports, except in ceiling applications where intermediate supports or gypsum board back-blocking is provided behind end joints. Do not place tapered edges against cut edges or ends. Stagger vertical joints on opposite sides of partitions. Do not make joints other than control joints at corners of framed openings.
- D. Form control and expansion joints with space between edges of adjoining gypsum panels.
- E. Cover both faces of support framing with gypsum panels in concealed spaces (above ceilings,

etc.), except in chases braced internally.

1. Unless concealed application is indicated or required for sound, fire, air, or smoke ratings, coverage may be accomplished with scraps of not less than 8 sq. ft. (0.7 sq. m) in area.
 2. Fit gypsum panels around ducts, pipes, and conduits.
 3. Where partitions intersect structural members projecting below underside of floor/roof slabs and decks, cut gypsum panels to fit profile formed by structural members; allow 1/4 to 3/8 inch (6 to 9 mm) wide joints to install sealant.
- F. Isolate perimeter of gypsum board applied to non-load-bearing partitions at structural abutments, except floors. Provide 1/4 to 1/2 inch (6 to 12 mm) wide spaces at these locations, and trim edges with edge trim where edges of panels are exposed. Seal joints between edges and abutting structural surfaces with acoustical sealant.

3.03. APPLYING INTERIOR GYPSUM BOARD

- A. Install interior gypsum board in the following locations:
1. Type X: Where required for fire-resistance-rated assembly.
- A. Single-Layer Application:
1. On partitions/walls, apply gypsum panels vertically (parallel to framing), unless otherwise indicated or required by fire-resistance-rated assembly, and minimize end joints.
 - a. Stagger abutting end joints not less than one framing member in alternate courses of panels.
 2. On furring members, apply gypsum panels vertically (parallel to framing) or horizontally (perpendicular to framing) with vertical joints offset at least one furring member. Locate edge joints of base layer over furring members.
 3. Fastening Methods: Apply gypsum panels to supports with steel drill screws.

3.04. INSTALLING TRIM ACCESSORIES

- A. General: For trim with back flanges intended for fasteners, attach to framing with same fasteners used for panels. Otherwise, attach trim according to manufacturer's written instructions.
- B. Control Joints: Install control joints at locations indicated on Drawings and if not shown, according to ASTM C 840 or GA-216 and in specific locations approved by Architect for visual effect.
- C. Interior Trim: Install in the following locations:
1. Cornerbead: Use at outside corners, unless otherwise indicated.
 1. LC-Bead: Use at exposed panel edges.

3.2 FINISHING GYPSUM BOARD

- A. General: Treat gypsum board joints, interior angles, edge trim, control joints, penetrations, fastener heads, surface defects, and elsewhere as required to prepare gypsum board surfaces for decoration. Promptly remove residual joint compound from adjacent surfaces.
- B. Prefill open joints, rounded or beveled edges, and damaged surface areas.
- C. Apply joint tape over gypsum board joints, except those with trim having flanges not intended for tape.
- D. Gypsum Board Finish Levels: Finish panels to levels indicated below and according to ASTM C 840, GA- 216 or GA-214:
1. Locations to receive Level 0 finish (no taping, finishing, or accessories required): Non-fire-rated, non-sound-rated, and non-smoke-rated assemblies in ceiling plenums and concealed areas, and in temporary construction
 2. Locations to receive Level 1 finish (all joints and interior angles shall have tape set in joint compound. Surface shall be free of excess joint compound. Tool marks and ridges are acceptable): Fire rated, sound rated, and smoke rated assemblies in plenum areas above ceilings, in attics, and in areas where the assembly would generally be concealed.
 3. Locations to receive Level 2 finish (all joints and interior angles shall have tape embedded in joint compound and wiped with a joint knife leaving a thin coating of joint

compound over all joints and interior angles. Fastener heads and accessories shall be covered with a coat of joint compound): Surfaces to receive moisture resistant gypsum board as a surfacing.

4. Locations to receive Level 3 finish (all joints and interior angles shall have tape embedded in joint compound and one additional coat of joint compound applied over all joints and interior angles. Fastener heads and accessories shall be covered with two separate coats of joint compound): Areas which are to receive heavy or medium-texture (spray or hand applied) before final painting, or where heavy-grade wall coverings are to be applied as the final decoration. This level of finish is not recommended where smooth painted surfaces or light to medium wall coverings are specified.
5. Locations to receive Level 4 finish (all joints and interior angles shall have tape embedded in joint compound and two separate coats of joint compound applied over all flat joints): All flat and eggshell paints, light textures, or wall coverings.

3.3 PROTECTION

- A. Protect installed products from damage from weather, condensation, direct sunlight, construction, and other causes during remainder of the construction period.
- B. Remove and replace panels that are wet, moisture damaged, and mold damaged.
 1. Indications that panels are wet or moisture damaged include, but are not limited to, discoloration, sagging, or irregular shape.
 2. Indications that panels are mold damaged include, but are not limited to, fuzzy or splotchy surface contamination and discoloration.

END OF SECTION

PAINTING
SECTION 09 9123

PART1 GENERAL

1.01 SECTION INCLUDES

- A. Interior and exterior paint including; paint and stains.

1.02 RELATED SECTIONS

- A. Coordinate with other prime contractors and sub-contractors to assure proper incorporation of and provision for items to be furnished or installed by them.
- B. Do not paint non-ferrous metals such as aluminum, stainless steel, copper, and lead coated copper, brass and bronze, or metals with baked enamel factory finish.

1.03 REFERENCES

- A. SSPC-SP 1 - Solvent Cleaning
- B. SSPC-SP 2 - Hand Tool Cleaning
- C. SSPC-SP 3 - Power Tool Cleaning
- D. SSPC-SP 13 / NACE No. 6 Surface Preparation for Concrete
- E. EPA-Method 24

1.04 SUBMITTALS

- A. Submit under provisions of Section 01300 - Submittals.
- B. Product Data: Manufacturer's data sheets on each paint and coating product should include:
 - 1. Product characteristics
 - 2. Surface preparation instructions and recommendations
 - 3. Primer requirements and finish specification
 - 4. Storage and handling requirements and recommendations
 - 5. Application methods
 - 6. Cautions
- C. Selection Samples: Submit a complete set of color chips that represent the full range of manufacturer's color samples available.
- D. Verification Samples: For each finish product specified, submit samples that represents actual product, color, and sheen.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Delivery: Deliver manufacturer's unopened containers to the work site. Packaging shall bear the manufacturer's name, label, and the following list of information:
 - 1. Product name, type (description)
 - 2. Application & use instructions
 - 3. Surface preparation
 - 4. VOC content
 - 5. Environmental issues
 - 6. Batch date
 - 7. Color number
- B. Storage: Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdiction.
Store materials in an area that is within the acceptable temperature range, per manufacturer's instructions. Protect from freezing.
- C. Handling: Maintain a clean, dry storage area, to prevent contamination or damage to the coatings.
- D. Keep all waste and paint rags in tightly covered metal containers. Gather up all material and dispose of at end of each work day.
- E. Mount an approved type fire extinguisher immediately outside all paint storage areas.

1.06 PROJECT CONDITIONS

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

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Acceptable Manufacturer:
 - 1. The Sherwin-Williams Company
 - 2. PPG
 - 3. Pratt and Lambert
 - 4. Approved Equal

2.02 MATERIALS - GENERAL REQUIREMENTS

- A. Paints and Coatings - General:
 - 1. Unless otherwise indicated, provide factory-mixed coatings. When required, mix coatings to correct consistency in accordance with manufacturer's instructions before application. Do not reduce, thin, or dilute coatings or add materials to coatings unless such procedure is specifically described in manufacturer's product instructions.
- B. Primers:
 - 1. Where the manufacturer offers options on primers for a particular substrate, use primer categorized as "best" by the manufacturer.
- C. All interior paints and primers must have VOC levels, in grams per liter, less than or equal to the thresholds established by South Coast Air Quality Management District (SCAQMD) Rule 1113

2.03 ACCESSORIES

- A. Coating Application Accessories:
 - 1. Provide all primers, sealers, cleaning agents, cleaning cloths, sanding materials, and clean-up materials required per manufacturer's specifications.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Do not begin application of paints and finishes until substrates have been properly prepared. Proceed with work only after conditions have been corrected, and approved by all parties, otherwise application of coatings will be considered as an acceptance of surface conditions.
- B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.
- C. Proceed with work only after conditions have been corrected, and approved by all parties, otherwise application of coatings will be considered as an acceptance of surface conditions.

3.02 SURFACE PREPARATION:

- A. Proper product selection, surface preparation, and application affect coating performance. Coating integrity and service life will be reduced because of improperly prepared surfaces. Selection and implementation of proper surface preparation ensures coating adhesion to the substrate and prolongs the service life of the coating system.
- B. Selection of the proper method of surface preparation depends on the substrate, the environment, and the expected service life of the coating system. Economics, surface contamination, and the effect on the substrate will also influence the selection of surface preparation methods.
- C. The surface must be dry and in sound condition. Remove oil, dust, dirt, loose rust, peeling paint or other contamination to ensure good adhesion.
- D. Remove mildew before painting by washing with a solution of 1 part liquid household bleach and 3 parts of warm water. Apply the solution and scrub the mildewed area. Allow the solution to remain on the surface for 10 minutes. Rinse thoroughly with clean water and allow the surface to dry 48 hours before painting. Wear protective glasses or goggles, waterproof gloves,

and protective clothing. Quickly wash off any of the mixture that comes in contact with your skin. Do not add detergents or ammonia to the bleach/water solution.

- E. No exterior painting should be done immediately after a rain, during foggy weather, when rain is predicted, or when the temperature is below 50°F unless the specified product is designed for the marginal conditions.
- F. Methods:
 - 1. CMU
Remove all loose mortar and foreign material. Surface must be free of laitance, concrete dust, dirt, form release agents, moisture curing membranes, loose cement, and hardeners. Concrete and mortar must be cured at least 30 days at 75°F. The pH of the surface should be between 6 and 9, unless the products to be used are designed to be used in high pH environments such as Loxon. On tilt-up and poured-in-place concrete, commercial detergents and abrasive blasting may be necessary to prepare the surface. Fill bug holes, air pockets, and other voids with a cement patching compound.
 - 2. Drywall—Interior
Must be clean and dry. All nail heads must be set and spackled. Joints must be taped and covered with a joint compound. Spackled nail heads and tape joints must be sanded smooth and all dust removed prior to painting.
 - 3. Galvanized Metal
Clean per SSPC-SP1 using detergent and water or a degreasing cleaner to remove greases and oils. Apply a test area, priming as required. Allow the coating to dry at least one week before testing. If adhesion is poor, Brush Blast per SSPC-SP7 is necessary to remove these treatments.
 - 4. Wood
Must be clean and dry. Prime and paint as soon as possible. Knots and pitch streaks must be scraped, sanded, and spot primed before a full priming coat is applied. Patch all nail holes and imperfections with a wood filler or putty and sand smooth.
 - 5. Aluminum Railings and Handrails Powder Coating
Provide a 1-2 mil profile via chemical, mechanical or blasting.

3.03 INSTALLATION

- A. Apply all coatings and materials with manufacture specifications in mind. Mix and thin coatings according to manufacture recommendation.
- B. Do not apply to wet or damp surfaces.
 - 1. Wait at least 30 days before applying to new concrete or masonry. Or follow manufacturer's procedures to apply appropriate coatings prior to 30 days.
 - 2. Test new concrete for moisture content.
 - 3. Wait until wood is fully dry after rain, fog or dew.
- C. Apply coatings using methods recommended by manufacturer.
- D. Uniformly apply coatings without runs, drips, or sags, without brush marks, and with consistent sheen.
- E. Apply coatings at spreading rate required to achieve the manufacturers recommended dry film thickness.
- F. Regardless of number of coats specified, apply as many coats as necessary for complete hide, and uniform appearance.
- G. Exterior Woodwork: If final painting must be delayed more than 2 weeks after installation of woodwork, apply primer within 2 weeks and final coating within 2 weeks.
- H. Inspection: The coated surface must be inspected and approved by the engineer or engineer just prior to each coat.

3.04 PROTECTION

- A. Protect finished coatings from damage until completion of project.
- B. Touch-up damaged coatings after substantial completion, following manufacturer's recommendation for touch up or repair of damaged coatings. Repair any defects that will hinder the performance of the coatings.

- C. Furnish and lay drop cloths in all areas where painting and finishing work is being done and protect all other work from defacement. Promptly replace all temporary protective coverings removed too early from any part of the work and make good any damage from neglect.

3.05 SCHEDULES

A. METAL

1. Latex Systems

a. Semi-Gloss Finish

1st Coat: S-W Kem Kromik® Universal Metal Primer, B50AZ0006

2nd Coat: S-W DTM Acrylic Semi-Gloss Coating, B66-200 Series

3rd Coat: S-W DTM Acrylic Semi-Gloss Coating, B66-200 Series

B. Aluminum

1. Powder Coating

a. Satin Finish

1st Coat: Apply PPG Ultra Primer - PCMT70101

2nd Coat: TGIC Polyester (Satin 20-30 Gloss)

C. DRYWALL

1. Latex Systems

a. Walls: Eggshell & Ceilings: Flat

1st Coat: S-W PrepRite® Classic Latex Primer, B28W101

2nd Coat: S-W ProMar 200® Waterbased Acrylic-Alkyd

3rd Coat: S S-W ProMar 200® Waterbased Acrylic-Alkyd

- D. Paint shall be applied in strict conformity with manufacturer's directions for original application.

- E. Any material to be painted not listed above is to be painted in accordance with manufacturer's recommendations.

END OF SECTION

SECTION 10 1400 SIGNAGE

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Building signs

1.02 REFERENCE STANDARDS

- A. 36 CFR 1191 - Americans with Disabilities Act (ADA) Accessibility Guidelines for Buildings and Facilities; Architectural Barriers Act (ABA) Accessibility Guidelines; current edition.
- B. ADA Standards - Americans with Disabilities Act (ADA) Standards for Accessible Design; 2010.
- C. ICC A117.1 - Accessible and Usable Buildings and Facilities; 2009.

1.03 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Product Data: Manufacturer's printed product literature for each type of sign, indicating sign styles, font, foreground and background colors, locations, overall dimensions of each sign.
- C. Signage Schedule: Provide information sufficient to completely define each sign for fabrication, including room number, room name, other text to be applied, sign and letter sizes, fonts, and colors.
 - 1. When room numbers to appear on signs differ from those on the drawings, include the drawing room number on schedule.
 - 2. Submit for approval by Owner through Architect prior to fabrication.
- D. Samples: Submit two samples of each type of sign, of size similar to that required for project, illustrating sign style, font, and method of attachment.
- E. Selection Samples: Where colors are not specified, submit two sets of color selection charts or chips.
- F. Manufacturer's Installation Instructions: Include installation templates and attachment devices.

1.04 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years of documented experience.

1.05 FIELD CONDITIONS

- A. Do not install tape adhesive when ambient temperature is lower than recommended by manufacturer.
- B. Maintain this minimum temperature during and after installation of signs.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- B. Dimensional Letter Signs:
 - 1. Inpro; www.inprocorp.com.
 - 2. impact signs . impactsigns.com
 - 3. Substitutions: See Section 01 6000 - Product Requirements.

2.02 SIGNAGE APPLICATIONS

- A. Accessibility Compliance: Signs are required to comply with ADA Standards and ICC A117.1 and UFAS, unless otherwise indicated; in the event of conflicting requirements, comply with the most comprehensive and specific requirements.

2.07 DIMENSIONAL LETTERS

- A. 12" high, and 6" high Metal Letters: Font – as selected from standard fonts provided by sign manufacturer.
 - 1. Metal: Aluminum casting.
 - 2. Mounting: Concealed screws, numbers mounted onto composite back board, back mounted to exterior wall.
 - 3. Locations: Exterior of Buildings as indicated on the drawings.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that substrate surfaces are ready to receive work.

3.02 INSTALLATION

- A. Install in accordance with manufacturer's instructions.
- B. Install neatly, with horizontal edges level.
- C. Locate signs and mount at heights indicated on drawings and in accordance with ADA Standards and ICC A117.1.
- D. Protect from damage until Substantial Completion; repair or replace damaged items.

END OF SECTION

SECTION 12 3600 COUNTERTOPS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Solid Surface for windowsills.

1.02 REFERENCE STANDARDS

- A. AWI (QCP) - Quality Certification Program; Current Edition.
- B. AWI/AWMAC/WI (AWS) - Architectural Woodwork Standards, 2nd Edition; 2014, with Errata (2016).
- C. AWMAC/WI (NAAWS) - North American Architectural Woodwork Standards; 2021, with Errata.
- D. ISFA 2-01 - Classification and Standards for Solid Surfacing Material; 2013.
- E. NEMA LD 3 - High-Pressure Decorative Laminates; 2005.

1.03 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements for submittal procedures.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
 - 1. Preparation instructions and recommendations.
 - 2. Storage and handling requirements and recommendations.
 - 3. Specimen warranty.
- C. Selection Samples: For each finish product specified, color chips representing manufacturer's full range of available colors and patterns.
- D. Test Reports: Chemical resistance testing, showing compliance with specified requirements.
- E. Certificate: Submit labels and certificates required by quality assurance and quality control programs.

1.04 QUALITY ASSURANCE

- A. Fabricator Qualifications: Natural Stone Institute (NSI) Accredited Natural Stone Fabricator; www.naturalstoneinstitute.org/#sle.
- B. Installer Qualifications: Company specializing in performing work of the type specified in this section, with not less than three years of documented experience.
- C. Quality Certification:
 - 1. Comply with AWI (QCP) woodwork association quality certification service/program in accordance with requirements for work specified in this section: www.awiqcp.org/#sle.
 - 2. Provide labels or certificates indicating that the installed work complies with AWI/AWMAC/WI (AWS) or AWMAC/WI (NAAWS) requirements for grade or grades specified.
 - 3. Provide designated labels on shop drawings as required by certification program.
 - 4. Provide designated labels on installed products as required by certification program.
 - 5. Submit certifications upon completion of installation that verifies this work is in compliance with specified requirements.

PART 2 PRODUCTS

2.01 WINDOWSILLS

- A. Solid Surfacing windowsills: Solid surfacing sheet or plastic resin casting over continuous substrate.
 - 1. Flat Sheet Thickness: 1/2 inch (12 mm), minimum.
 - 2. Solid Surfacing Sheet and Plastic Resin Castings: Complying with ISFA 2-01 and NEMA LD 3; acrylic or polyester resin, mineral filler, and pigments; homogenous, non-porous and capable of being worked and repaired using standard woodworking tools; no surface coating; color and pattern consistent throughout thickness.

- a. Manufacturers:
 - 1) Formica Corporation; www.formica.com/#sle.
 - 2) Wilsonart; www.wilsonart.com/#sle.
 - 3) Substitutions: See Section 01 6000 - Product Requirements.
- b. Finish on Exposed Surfaces: Matte, gloss rating of 5 to 20.
- c. Color and Pattern: As selected by Architect from manufacturer's full line.

2.02 MATERIALS

- A. Adhesives: Chemical resistant waterproof adhesive as recommended by manufacturer of materials being joined.

2.03 FABRICATION

- A. Fabricate sills in the largest sections practicable, with top surface of joints flush.
 - 1. Join lengths of sills using best method recommended by manufacturer.
 - 2. Fabricate to overhang sills 1 inch (25 mm)

PART 3 EXECUTION

3.01 EXAMINATION

- A. Do not begin installation until substrates have been properly prepared.
- B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.
- C. Verify that wall surfaces have been finished

3.02 INSTALLATION

- A. Securely attach sills using concealed fasteners. Make flat surfaces level; shim where required.
- B. Seal joint between ends and vertical surfaces.

3.03 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 32 1313
CONCRETE PAVING**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Concrete sidewalks

1.02 RELATED REQUIREMENTS

- A. Section 03 3000 - Cast-in-Place Concrete.

1.03 REFERENCE STANDARDS

- A. ACI 211.1 - Standard Practice for Selecting Proportions for Normal, Heavyweight, and Mass Concrete; 1991 (Reapproved 2009).
- B. ACI 301 - Specifications for Structural Concrete; 2010 (Errata 2012).
- C. ACI 305R - Hot Weather Concreting; 2010.
- D. ACI 306R - Cold Weather Concreting; 2010.
- E. ASTM A615/A615M - Standard Specification for Deformed and Plain Carbon Steel Bars for Concrete Reinforcement; 2015.
- F. ASTM A1064/A1064M - Standard Specification for Carbon-Steel Wire and Welded Wire Reinforcement, Plain and Deformed, for Concrete; 2015.
- G. ASTM C39/C39M - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens; 2015a.
- H. ASTM C94/C94M - Standard Specification for Ready-Mixed Concrete; 2015.
- I. Pennsylvania Department of Transportation (PennDOT) - Publication 408; Current Edition.

1.05 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.

PART 2 PRODUCTS

2.01 PAVING ASSEMBLIES

- A. Comply with applicable requirements of ACI 301.

2.02 FORM MATERIALS

- A. Form Materials: As specified in Section 03 1000, conform to ACI 301.

2.03 REINFORCEMENT

- A. Steel Welded Wire Reinforcement: Plain type, ASTM A1064/A1064M; in flat sheets; unfinished.
- B. Dowels: ASTM A615/A615M, Grade 60 - 60,000 psi yield strength; deformed billet steel bars; unfinished finish.

2.04 CONCRETE MATERIALS

- A. Concrete Materials: As specified in Section 03 3000.

2.05 CONCRETE MIX DESIGN

- A. Proportioning Normal Weight Concrete: Comply with ACI 211.1 recommendations.

2.06 MIXING

- A. Transit Mixers: Comply with ASTM C94/C94M.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify compacted subgrade is acceptable and ready to support paving and imposed loads.
- B. Verify gradients and elevations of base are correct.

3.02 SUBBASE

- A. Prepare subbase in accordance with State of Pennsylvania Highways standards.

3.03 PREPARATION

- A. Moisten base to minimize absorption of water from fresh concrete.
- B. Coat surfaces of manhole and catch basin frames with oil to prevent bond with concrete pavement.
- C. Notify Architect minimum 24 hours prior to commencement of concreting operations.
- D. Verify that formwork layout complies with the drawings and that all handicap accessibility requirements are satisfied prior to placing concrete.

3.04 FORMING

- A. Place and secure forms to correct location, dimension, profile, and gradient.
- B. Assemble formwork to permit easy stripping and dismantling without damaging concrete.
- C. Place joint filler vertical in position, in straight lines. Secure to formwork during concrete placement.

3.05 REINFORCEMENT

- A. Place reinforcement as indicated.
- B. Place dowels to achieve pavement and curb alignment as detailed.

3.06 COLD AND HOT WEATHER CONCRETING

- A. Follow recommendations of ACI 305R when concreting during hot weather.
- B. Follow recommendations of ACI 306R when concreting during cold weather.
- C. Do not place concrete when base surface temperature is less than 40 degrees F, or surface is wet or frozen.

3.07 PLACING CONCRETE

- A. Place concrete as specified in Section 03 3000.
- B. Concrete may be placed using the slip form techniques, if contractor demonstrates this capability by constructing a mock-up for the owners and engineers approval.

- C. Ensure reinforcement, inserts, embedded parts, formed joints are not disturbed during concrete placement.
- D. Place concrete continuously over the full width of the panel and between predetermined construction joints. Do not break or interrupt successive pours such that cold joints occur.
- E. Place concrete to pattern indicated.
- F. Apply surface retarder to all exposed surfaces in accordance with manufacturer's instructions.

3.08 JOINTS

- A. Align sidewalk joints.
- B. Place 3/8 inch wide expansion joints at 20 foot intervals and to separate paving from vertical surfaces and other components and in pattern indicated.
- C. Provide scored joints as indicated.
- D. Provide keyed joints as indicated.
- E. Saw cut contraction joints 3/16 inch wide at an optimum time after finishing. Cut 1/3 into depth of slab.

3.09 FINISHING

- A. Sidewalk Paving: Light broom, texture perpendicular to direction of travel with troweled and radiused edge 1/4 inch radius.
- B. Place curing compound on exposed concrete surfaces immediately after finishing. Apply in accordance with manufacturer's instructions.

3.10 TOLERANCES

- A. Maximum Variation of Surface Flatness: 1/4 inch in 10 ft.
- B. Maximum Variation From True Position: 1/4 inch.
- C. Tolerances shall not alleviate the contractor's responsibility to comply with the requirements for handicap accessibility.

3.11 FIELD QUALITY CONTROL

- A. An independent testing agency shall perform field quality control tests, as specified in Section 01 4000 - Quality Requirements.
 - 1. Provide free access to concrete operations at project site and cooperate with appointed firm.
- B. Compressive Strength Tests: ASTM C39/C39M; for each test, mold and cure three concrete test cylinders. Obtain test samples for every 75 cu yd or less of each class of concrete placed.
 - 1. Take one additional test cylinder during cold weather concreting, cured on job site under same conditions as concrete it represents.
 - 2. Perform one slump test for each set of test cylinders taken.
- C. Maintain records of placed concrete items. Record date, location of pour, quantity, air temperature, and test samples taken.

3.12 PROTECTION

- A. Immediately after placement, protect pavement from premature drying, excessive hot or cold temperatures, and mechanical injury.

- B. Do not permit pedestrian traffic over pavement for 7 days minimum after finishing.

END OF SECTION